TENTATIVE AGENDA STATE WATER CONTROL BOARD MEETING WEDNESDAY, MARCH 15, 2006 HOUSE ROOM C, GENERAL ASSEMBLY BUILDING 9TH & BROAD STREETS RICHMOND, VIRGINIA

Convene - 9:30 A.M.

I.	Minutes (December 7, 2005)		Tab A
II.	Final Regulations General VPDES Permit for Car Wash Facilities Water Quality Management Plan – Technical Correction	Cosby Kennedy	B C
III.	Proposed Regulations General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia	Winter	D
IV.	Regulatory Petitions Hazel River Exceptional State Water Petition	Pollock	Е
V.	TMDLs Spring Branch Total Phosphorus TMDL, Sussex Co. Powell River TMDLs Russell Prater Creek Total Dissolved Solids and Sediment, Buchanan and Dickenson Counties Straight Creek Total Dissolved Solids, Sediment and Bacte Callahan Creek Total Dissolved Solids, Sediment and Bacte		F G
VI.	Permit and Consent Order – Valley Regional Office Woodstock STP, Shenandoah County	Chewning/Fowler	Н
VII.	Consent Special Orders - Virginia Pollutant Discharge Elimination System Permits Valley Regional Office Massanutten Public Service Authority, Rockingham Co. South Central Regional Office Town of Chase City, Mecklenberg Co. Piedmont Regional Office C.R. Beard d/b/a/ Red Hill MHP, Prince George Co. Doswell All-American Travel Plaza, Hanover Co. Tyson Foods, Inc., Hanover Co. Town of Warsaw, Richmond Co. Southwest Regional Office	Faulkner Liggett Golden Sizemore	I
	Cardinal Realty d/b/a Cardinal Stone-Galax Quarry, Galax		

	Tidewater Regional Office BASF Corporation, Portsmouth BBB, LLC, Chesapeake Robert L. Magette, Isle of Wight Co. Oceana Salvage, Inc., Virginia Beach Perdue Farms, Inc., Accomack Co. TCS Materials, Inc., Chesapeake & Virginia Beach Northern Regional Office Town of Culpeper, Culpeper Co. Fauquier County WSA, Vint Hill Farms WWTP Town of Hamilton, Loudoun Co. The Madeira School, Inc., Fairfax Co. Oak Grove Mennonite Church, Madison Co. Rappahannock Co. High School STP Six-O-Five Village Mobile Home Park STP, Louisa Co. U.S. Dept. of Defense, Arlington Co.	Nold Bowden	
VIII.	Consent Special Orders – Virginia Water Protection Permit P Northern Regional Office Mendleson Development, LLC, Louisa Co. Stanley Martin Companies, Inc., Prince William Co. Beazer Homes, Prince William Co. West Central Regional Office North Oaks, LLC, Salem Piedmont Regional Office Evergreen Development, Gloucester Co.	rograms Bowden Dietrich Golden	J
IX.	Consent Special Orders – Virginia Pollution Abatement Perm Piedmont Regional Office Carroll's Food, Inc., Isle of Wight & Sussex Counties Valley Regional Office Augusta Cooperative Farm Bureau, Inc., Staunton	nit Program Golden Faulkner	K
Х.	Consent Special Orders – Other Programs Valley Regional Office Baldwin J. Locher, Jr., Rockbridge Co. Plecker Construction Co., Inc., Staunton Piedmont Regional Office Vane Line Bunkering, Inc., Henrico Co.	Faulkner Golden	L
XI.	Significant Noncompliance Report	O'Connell	M
XII.	Public Forum		
XIII.	Other Business Brownfield Remediation Loan Program Director's Report Future Meetings	Gills Gilinsky Berndt	N O

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions arising as to the latest status of the agenda should be directed to Cindy M. Berndt at (804) 698-4378.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for their consideration.

For **REGULATORY ACTIONS** (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period and one public meeting) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period and one public hearing). Notice of these comment periods is announced in the Virginia Register and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For <u>CASE DECISIONS</u> (issuance and amendment of permits and consent special orders), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. If a public hearing is held, there is a 45-day comment period and one public hearing. If a public hearing is held, a summary of the public comments received is provided to the Board for their consideration when making the final case decision. Public comment is accepted on consent special orders for 30 days.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for **final** adoption. At that time, those persons who participated in the prior proceeding on the proposal (i.e., those who attended the public hearing or commented during the public comment period) are allowed up to 3 minutes to respond to the summary of the prior proceeding presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions

of this permit. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then, in accordance with § 2.2-4021, allow others who participated in the prior proceeding (i.e., those who attended the public hearing or commented during the public comment period) up to 3 minutes to exercise their right to respond to the summary of the prior proceeding presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

POOLING MINUTES: Those persons who participated in the prior proceeding and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in **rare** instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who participated during the prior public comment period **shall** submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. For a regulatory action should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, an additional public comment period may be announced by the Department in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than pending regulatory actions or pending case decisions. Anyone wishing to speak to the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentation to not exceed 3 minutes.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

<u>Department of Environmental Quality Staff Contact:</u> Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 10009, Richmond, Virginia 23240, phone (804) 698-4378; fax (804) 698-4346; e-mail: cmberndt@deq.virginia.gov.

Minutes (December 7, 2005)

General VPDES Permit for Car Wash Facilities: This regulatory action is needed in order to establish appropriate and necessary permitting requirements for dischargers of wastewater from car wash operations. These discharges are considered to be point sources of pollutants and thus are subject to regulation under the VPDES permit program. The existing general permit expires on October 15, 2007. The general permit is being reissued in order to continue making it available for car washes after that date. This is a reissuance of an existing regulation, and changes to the regulation are designed to clarify the intent of the regulation.

Water Quality Management Plan – Technical Correction: At the Board's September 21, 2005 meeting, nutrient waste load allocations were adopted for significant dischargers in the Shenandoah-Potomac, Rappahannock, and Eastern Shore Basins. The Board was notified that these final allocations accounted for changes based on revised design flow values for some facilities, and waste loads for all the listed dischargers shown in whole pounds per year, rather than rounded off to two significant figures as shown in previous draft amendments. Upon close review of the final regulation text provided by the Registrar's Office, it was noted that the total phosphorus allocation for Tyson Foods – Temperenceville was still shown as rounded off to two significant figures and did not account for a revision to the design flow value, while the total nitrogen allocation was correct. The total phosphorus sum for the Eastern Shore Basin dischargers was also correct, necessitating only a technical correction to the individual value for Tyson's total phosphorus allocation. The technical correction will amend 9 VAC 25-720-110 C by revising the total phosphorus waste load allocation figure for Tyson Foods – Temperenceville (VA0004049) from 980 to 1,142 pounds per year.

9 VAC 25-820-10 et seq. – General Virginia Pollution Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia: The purpose of this regulatory action is to issue a Watershed General Virginia Pollutant Discharge Elimination System (VDPES) Permit authorizing point source discharges of total nitrogen and total phosphorus to the waters of the Chesapeake Bay and its tributaries. In 2005, the State Water Control Board approved amendments to 9 VAC 25-40 (the Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed) and to 9 VAC 25-720 (the Water Quality Management Planning Regulation). These regulatory actions, taken together, established permit limitations for two nutrients -- total nitrogen and total phosphorus -- for certain dischargers within Virginia's portion of the Chesapeake Bay watershed. The resulting permit limitations will be expressed principally as annual waste load allocations, and also as technology-based annual average concentrations where appropriate and authorized.

This rulemaking is proposed to provide a permitting framework that fulfills the intent of the aforementioned regulatory actions, in accordance with 2005 amendments to §62.1-44.19:14 of the Code of Virginia; these amendments direct the State Water Control Board to issue a Watershed General Virginia Pollutant Discharge Elimination System Permit authorizing point source discharges of total nitrogen and total phosphorus to the waters of the Chesapeake Bay and its tributaries. The 2000 Chesapeake Bay Agreement and multi-state cooperative and regulatory initiatives establish allocations for nitrogen and phosphorus delivered to the Chesapeake Bay watershed. These initiatives will require public and private point source dischargers of nitrogen and phosphorus to achieve significant reductions of these nutrients to meet the cap load allocations. The Virginia General Assembly found that adoption and utilization of a watershed general permit and market-based point source nutrient credit trading program will assist in meeting these cap load allocations cost-effectively and as soon as possible in keeping with the 2010 timeline and objectives of the Chesapeake 2000 agreement, accommodating continued growth and economic development in the Chesapeake Bay watershed, and providing a foundation for establishing market-based incentives to help achieve the Chesapeake Bay's non-point source reduction goals.

This regulation establishes the registration and permitting of total nitrogen and total phosphorus loads discharged into the Chesapeake Bay Watershed in Virginia, and establishes procedures by which those loads may be exchanged among those permittees located in the respective Chesapeake Bay tributary watersheds. The regulation includes registration requirements, effluent limitations, compliance plan and schedule requirements, monitoring and reporting requirements, conditions under which nutrient trading is permitted, conditions applicable to new and expanded facilities, and conditions applicable to all facilities covered under this permit. This permit differs from other VPDES general permits in that: 1) the compliance schedule focuses on the aggregate performance of all of the facilities within a tributary watershed as opposed to the individual facilities themselves, 2) the permit will be issued in addition to the individual VPDES permits that the affected facilities are already required to hold, and 3) rather than outlining facilities that may register for permit coverage, it

incorporates all VPDES dischargers by rule and requires specific categories of facilities to register for coverage under the general permit and comply with the requirements therein.

Consideration of Petition to Designate the Hazel River as an Exceptional State Water: Staff intends to ask the Board at their March 15, 2006 meeting for a decision on whether or not to initiate a rulemaking to amend the Water Quality Standards regulation to designate the Hazel River from its headwaters to its confluence with the Rappahannock River as an Exceptional State Water. The upper portion of the nominated waterbody [approximately 15 miles] is within Rappahannock County and lower portion [approximately 30 miles] is within Culpeper County, Based on site visits, staff has concluded that only the segment of the Hazel River within Rappahannock County meets the required eligibility criteria. The Rappahannock County Board of Supervisors submitted comment acknowledging that Tier III protection of the Hazel River is consistent with the county Comprehensive Plan, but they oppose the nomination due to concerns of possible future restrictive amended regulations that could adversely impact existing or proposed sewage treatment facilities. The Culpeper County Board of Supervisors commented in support of the nomination. Seventy-nine citizen comments in support of the nomination were received. Twenty-one of them were identified as riparian landowners. Sixteen citizen comments opposing the nomination were received and of these five were identified as riparian landowners. The four staff members that conducted the site visit concurred that the segment of the Hazel River within Rappahannock County met the criteria necessary to be considered for an Exceptional State Waters designation. The segment within Culpeper County did not meet the primary eligibility criteria of possessing an exceptional environmental setting Also, based on an assessment of 2002 data, a 5.58 mile segment in Culpeper County is listed as impaired for recreational uses due to exceedences of the fecal coliform bacteria standard.

Spring Branch Total Phosphorus TMDL, Sussex Co.: A proposed Total Maximum Daily Load (TMDL) report was developed in response to a benthic (biological) impairment on Spring Branch in Sussex County. Total Phosphorus (TP) was identified as the pollutant of concern and TMDL target. The TMDL impacts the Sussex County Service Authority (SSA) sewage treatment plant which was identified as a major source of the benthic (biological) impairment. The phosphorus Waste Load Allocation (WLA) assigned to SSA will be difficult to achieve at maximum design flow. Given the current limits of nutrient removal technology and the economic status of the community served by SSA, the DEQ staff has developed an innovative approach that will allow the SSA time to attempt reasonable alternative measures to achieve the TMDL goal. However, the TMDL document also recognizes that if those measures fail to accomplish the desired result, the alternative of reducing the beneficial use designation of the stream segment through a Use Attainability Analysis should be considered.

Powell River TMDLs Board Approval for Submitting Three Total Daily Maximum Load (TMDL) Reports to EPA Region 3 for Their Review and Approval: Straight Creek (Lee County) - Fecal Bacteria and Benthic TMDLs, Callahan Creek (Wise County) - Fecal Bacteria and Benthic TMDLs and Russell Prater Creek (Buchanan and Dickenson Counties) - Benthic TMDL: At the Board's meeting on September 27, 2005, staff requested for the first time authorization to submit the Straight, Callahan, and Russell Prater Creeks TMDL reports to EPA for approval. This action was requested because of the many concerns expressed by the coal companies in Straight and Callahan Creeks. Up to this point staff had always used the delegation section of the TMDL Public Participation Guidance. DEQ staff presented the TMDL development process and DMLR presented their permitting plan for implementing the point source waste loaod allocations (WLAs) through Best Management Practices (BMPs). Coal company consultants and attorney presented their many concerns to the Board. These concerns are briefly summarized as follows: technical validity of biological monitoring, legal validity of the general standard and its application in the TMDL waste load allocation (WLA), technical adequacy of chemical water quality data used in the TMDL, inadequate or flawed TMDL modeling, inadequate public out reach, and economic impacts of the TMDL (especially treating the pollutant total dissolved solids (TDS) by reverse osmosis). The Board directed staff to continue meeting/negotiating with coal companies, evaluate any additional data provided by the companies, develop a cost analysis of implementing the TMDLs, and report on progress at the Board's March meeting. Following the directions received at the Board's September 27th, 2005 meeting, DEQ staff held several meetings with the representatives of the Virginia Coalfields TMDL Group to negotiate benthic TMDLs acceptable to DEQ, Division of Mined Land Reclamation (DMLR) of the Department of Mines Minerals and Energy (DMME), EPA and the affected coal companies. A cooperative solution was negotiated in early February that includes the following provisions in each of the benthic TDS TMDLs: the Virginia Coalfields TMDL Group accept the TMDL TDS endpoint represented by 334 mg/l; the TMDLs will not specify point source TDS reductions because of the lack of TDS data for the discharges, TDS monitoring of the discharge will occur during the during the permit cycle; after, the five year cycle the TDS data would be evaluate to determine if TDS reductions are needed in the TMDLs; and if TDS reductions are needed, the TMDL would enter the public out reach process for revision and possible amendment. The TMDL reports would specify growth opportunities. Also, the point source waste load allocation (WLA) implementation process under this proposal would be as follows: DMLR will be requiring monitoring of the permitted discharge points to obtain the water quality data necessary to determine the existing loads. If TDS reductions from permitted sources are required, e.g. based on future monitoring data, the reductions will be made through the application of appropriate BMPs. The Commonwealth's commitment to BMP implementation will be reinforced by incorporating it with the TDS WLAs adopted in the Water Quality Management Planning Regulation. The Virginia Coalfields TMDL Group has agreed to continue working with DEQ and DMLR on the cooperative solution. They will be reviewing the TMDL reports as we modify them to include the agreed upon provisions.

Town of Woodstock, Consent Special Order with a civil charge: Woodstock owns and operates a sewage treatment plant serving the Town with approximately 3,000 residents in Shenandoah County, Virginia. While the design capacity of the Facility has been rated and approved as 1.0 MGD, the permitted flow is set at 0.8 MGD and the effluent limitations are based on that flow. As of May 2003, the effluent flows from the Facility exceeded the permitted flows for three consecutive months. The Town failed to recognize the significance of this exceedance and failed to report it to DEQ as required by the Permit. During 9 months out of a 24-month period (March 2003 through March 2005), the monthly average flows through the Facility have exceeded the Facility's permitted flow. These high flows appear to coincide with periods of wet weather. The Town's sewage collection system receives excessive I&I, which is causing the Facility's permitted flow to be exceeded. In addition, these excessive flows have caused problems with the Facility's ability to properly treat the wastewater coming to the Facility. The Town also has a history of solids handling problems. DEQ's files show that the Town has maintained a high solids inventory at the Facility for years due to inadequate sludge disposal capabilities. There have been numerous citizen and operator reports of solids losses from the Facility. Although the Town brought on line a new enlarged sludge digester in January 2003, the Town has continued to experience sludge handling problems. On January 20, 2005, DEQ issued NOV No. W2005-01-V-0006 to Woodstock for unauthorized discharges (overflows and unusual discharges) violations occurring during October and December 2004, and an unapproved Facility modification. The NOV noted that the overflows were not reported to DEQ in a timely manner. The NOV also cited the failure to submit to DEQ a notification letter regarding excess of 95% of the permitted flow capacity for three consecutive months, and failure to submit a corrective action plan to address the high influent flows due by October 16, 2004. The Town is proposing to construct a new Facility with a higher design capacity, which will place the Facility into the major municipal category. Woodstock is already considered a significant nutrient discharger to the Chesapeake Bay, which will require the Town to design the Facility to meet nutrient limits in the future. These issues will have a significant impact on the Town's discharge permit and the planning to address the ongoing problems. The proposed Order, signed by the Town of Woodstock on July 12, 2005, would require the Town to take corrective actions to address solids handling problem at the Facility, to initiate I&I studies for corrective actions and upgrade and expand the sewage treatment plant to meet final effluent limitations. The Order would also contain a civil charge. Civil Charge: \$4,200 The public notice period for the proposed Consent Order was completed on September 7, 2005, and DEQ received a number of comments. DEQ has responded to the public notice comments. The proposed Order's initial public notice comments and DEQ responses are noted below. Based on the number of comments for both the draft Permit and the proposed Consent Order, DEQ conducted a Public Hearing. The comments and DEO responses regarding the Order following the Public Hearing are described in the Board Book under the Woodstock permit. A revised Consent Order has been presented to the Town of Woodstock that addresses the comments following the Hearing. The Town of Woodstock accepted and signed the revised Consent Order on February 13, 2006, and returned the signed copies of the Order. Public Notice Comment: The Town and/or

DEO should commit to a public meeting to explain the contents of the Town's short-term corrective action plan to improve the performance of the plant and take public comments on the draft plan. In addition, citizens asked that the Order require Woodstock to provide electronic copies to them of all notices and reports called for under the Order and any of the Town's reports of non-compliance. **DEQ Response:** As part of the public's right to know, you may review the plans that the Town develops, and DEQ can meet with you to discuss our part in the review and approval process. Also, as part of the public's right to know, you may review the Town's records regarding any reports of non-compliance or reports for the Order. It is the Town's responsibility under the Freedom of Information Act to provide information to its citizens when requested. DEO has discussed with the Town the possibility of the Town developing a web site that could be used to post such notices. DEQ suggested to the Town that we jointly have a public meeting to discuss citizens' concerns. The Town Attorney advised us the Town would not agree to call a meeting. We think the electronic posting is a good idea and we have written the Town to encourage its adoption. Public Notice Comment: Many citizens expressed concern about the Order not requiring the Town to conduct I&I repairs/corrective actions after completing the I&I studies required by the Order. The citizens wanted to be reassured that the plant could handle the flows even before the proposed upgraded/expanded plant comes on line. **DEQ Response:** I&I issues are generally addressed by studying the problems and then either addressing those issues through a plant expansion, which may include equalization to handle the increased flows, and/or conducting I&I corrective action work to reduce the high flows. The Town's consultants have assured DEQ that the new plant is to be designed to handle the increased flows and will include equalization capabilities. The Town is also proposing short-term corrective actions to limit the effects of I&I on the plant performance while it constructs a plant upgrade/expansion. The Town has also indicated that it intends to conduct collection system rehabilitation after the Town completes the studies required by the Order. Based on the Public Hearing comments, a proposed revised Consent Order has been presented to the Town of Woodstock that would require the town to implement the recommendations proposed in its January 3, 2006 I&I study report for additional I&I studies and remediation work on the collection system. Presently the town is evaluating the proposed revisions to the Consent Order. Public Notice Comment: Citizens expressed concern that the treatment plant should be staffed 24 hours/7 days per week and staffing should be increased during significant rainfall events. DEQ Response: The regulations regarding staffing of plants contain only suggested manning of the plant based on size of the facility. The Order does require the Town to take certain effluent samples on a 7-day-per-week schedule, which will require the presence of an operator. It is felt that the Order's requirements speak to the issue by requiring an operator be present during the hours of 4:00 P.M. and 7:00 A.M. (past normal working hours) during periods when there is a weather forecast of 2 inches or greater of rainfall. The plant will be manned 16 hours/day in accordance with the Operations and Maintenance Manual. The Town of Woodstock is currently working with DEQ Inspections staff to update their Operations and Maintenance Manual, including operator staffing at the facility. The Sewage Collection and Treatment regulations recommend that a licensed operator be present at the facility 8 hours per day, and that the facility be manned 16 hours per day. Public Notice Comment: The civil charge contained in the Order should be substantially increased to serve as a disincentive to violate the law. The Order should also contain stipulated penalties for any future violations of the Order. **DEO Response:** DEO uses a standardized penalty matrix to guide the calculations of the civil charge that is presented in all of our Orders. This tool provides a consistent approach to calculating the civil charge in all Orders. DEQ certainly agrees that a civil charge should serve as a disincentive to violate the laws and regulation of the State of Virginia. It is important to understand in this case that the sewage treatment plant has not exceeded its permit's effluent limitations, and DEQ has not found any demonstrable environmental impacts on the receiving stream. For these reasons, DEQ believes that the civil charge in the proposed Order is appropriate. Our legal guidance has made it clear that DEQ does not have the authority to include or collect stipulated penalties for future violations. Public Notice Comment: DEQ should not allow the Town to make any additional connections to the collection system until after the CTO for the upgraded/expanded plant is issued so as to ensure adequate capacity. **DEQ Response:** DEQ does not have the authority to unilaterally impose a moratorium on connections to the Town's collection system. Since the Order requires the Town to upgrade and expand the plant to address flow and performance issues, the Town may allow additional connections as long as capacity exists. The Town's consultants have proposed a short-term corrective action plan to improve the plant's performance during high flow periods to limit solids carryover while the Town constructs the plant upgrade. It is important to recognize that the Town has not exceeded its permitted

flow for three consecutive months since 2003, and it has not exceeded its permit's effluent limitations. The Town has indicated that while there are a number of proposed future connections, they will be spread out over a period of time and should not impact on the plant. However, if the situation changes substantially, DEQ could amend the Order to incorporate any changes needed to ensure compliance. It is the Town's responsibility to not allow additional connection to the collection system that will cause the sewage treatment plant to exceed its permitted flow requirements or effluent limitations. Based on the Public Hearing comments, a proposed revised Consent Order has been presented to the Town of Woodstock that would require the town to take immediate action to limit further connections to the collection system should the facility exceed 95% of its permit's design capacity for three consecutive months, or for four or more months in a six-month period until the new upgraded/expanded facility comes on line. Presently the town is evaluating the proposed revisions to the Consent Order. Public Notice Comment: Woodstock should be required to demonstrate that it has the ability to pay for the construction of the new plant when it submits the PER for the new plant. **DEO Response:** The issue of the Town's ability to finance the design and construction of an upgraded/expanded sewage treatment plant is certainly a pertinent issue. Woodstock has made application for loan monies through the Department. Certainly, if there is a delay in the Town obtaining monies for the plant that may/will slow down the completion of the project, DEQ would have good cause to amend the Order to reset a schedule of compliance for the completion of the plant. Public Notice Comment: The Consent Order should state that DEQ will conduct quarterly unannounced audits of the plant until the expansion is completed and operating normally, and establish a payment to DEQ to cover any related costs. **DEQ Response:** DEQ does conduct random unannounced inspections of facilities. In the recent past, DEQ has conducted a number of inspections at the Town's sewage treatment plant. Many of these inspections have resulted from citizen complaints about the performance of the plant. In addition, DEQ has conducted a number of operator-assistance visits at the plant because of DEQ's continuing concerns about the plant's performance. DEQ will continue to conduct inspections of this sewage treatment plant on an as-needed basis.

Modification and Reissuance of VPDES Permit No. VA0026468, Woodstock STP, Shenandoah County: The permittee, the Town of Woodstock, has applied for modification and reissuance of their permit to discharge treated wastewater from a treatment plant serving the Town of Woodstock. On January 21, 2005, the permittee submitted a modification request that included expanded flow tiers of 1.0 MGD and 2.0 MGD and the removal of land application as a biosolids disposal option. Although the design flow of the facility is 1.0 MGD, the previous permits had only included limits for a discharge flow of 0.8 MGD. The modification request was considered complete upon receipt. The permittee submitted a plan of action on January 25, 2005, which also contained a schedule for the proposed expansion and a plan and schedule for an inflow and infiltration study. Processing of the modification request was delayed while waiting for final approval of the nutrient wasteload allocations that should be applied to this discharge. Those allocations were approved this past summer. Due to this delay, the permit is approaching its expiration date. Consequently, the modification request is now being processed with the reissuance of the permit. The reissuance application was received on September 12, 2005. Additional information was required in order to process the reissuance, and the application was considered complete on October 27, 2005. Notice to adjacent landowners was provided on September 19, 2005, and the public notice for the proposed modification was published in the Shenandoah Valley-Herald on September 14, 2005, and September 21, 2005. The public notice for the proposed reissuance and hearing was published in the Northern Virginia Daily on December 8, 2005, and December 15, 2005. During the first public comment period for the draft permit, the agency received: (1) one telephone call and 4 emails (one of which was signed by 8 individuals) from private citizens objecting to the draft permit and requesting a public hearing; (2) one email from the Friends of the North Fork of the Shenandoah River objecting to the draft permit and requesting a hearing; and (3) one email requesting additional information. Summary of Public Comments and Agency Response to Comments: Public Comment: The permit should state that the conversion to 2.0 MGD and associated limits must occur before 2010 or the permit will be revoked. Alternatively, the phosphorus and nitrogen limits should be listed under the table for 1.0 MGD with an effective date of 2010 so that they will need to meet those limits whether or not the expansion is completed on time. **DEQ Response:** Effluent limits for Total Nitrogen (TN) and Total Phosphorus (TP), as well as a 4-year schedule of compliance for achieving compliance with the limits, have been included in the draft permit, in accordance with current agency guidance.

The TN and TP limits now listed in the permit will have to be met within 4 years of the permit reissuance, regardless of the facility's design flow at the time, unless an extension is granted via the proposed General Permit, or an enforcement action. Public Comment: BOD and TSS monitoring should be required daily during periods of high rain and high flow through the plant, given the poor track record of this plant during rain events. Otherwise, frequent exceedances will go undetected. **DEQ Response:** The BOD₅ monitoring frequency has been corrected to reflect 5 Days/Week, in accordance with the VPDES Permit Manual. An incorrect version of the draft permit had been sent to the permittee and the citizens requesting copies of the permit. The facility is required to report unusual discharges or bypasses that result from high flow events. In addition, the proposed Consent Order requires daily monitoring of BOD₅ and TSS, and also requires staffing of the facility between the hours of 4:00 p.m. and 7:00 a.m. should the National Weather Service forecast a precipitation event of 2 inches or greater. Public Comment: Footnote d. of the limits tables says that the permittee must achieve 85% removal of BOD and TSS. This condition is appropriate and should be made an enforceable requirement. However, the draft has no requirement to demonstrate compliance. Testing of influent and effluent should be required each time the effluent is monitored for BOD and TSS, and the efficiency calculated. The control efficiency should be enforced and listed in the DMRs. **DEQ Response:** This requirement is presented in the draft permit in accordance with current agency guidance. The concern raised was presented to our Central Office staff and the other regional water permit managers for their consideration, and we believe that the issue is adequately addressed by the footnote as written. The requirement for this facility to comply with the nutrient limits in the permit will ensure far greater than 85% removals of influent BOD and TSS. Public Comment: Footnote f. of the limits tables correctly calls for the elimination of solids or foam from the discharge. As written, this provision is not practically enforceable. This requirement should be accompanied by a daily obligation for the operator to record the conditions of the effluent with regard to these physical aspects, and the report should be accompanied by a certification of accuracy by the operator. Violations of the requirement should appear in the monthly DMRs. **DEQ Response:** Typically, compliance with this requirement is addressed in a facility's O&M Manual. The Town of Woodstock is currently updating their O&M Manual, and we will ensure that this requirement is included in the revised O&M Manual before it is approved. Public **Comment:** The monthly and weekly average daily loading limits for BOD and TSS under the 2.0 MGD set of conditions are more than twice the allowed loading for the 1.0 MGD operation. Daily loading should not be allowed to increase. This is inconsistent with the backsliding requirements established in 9 VAC 25-31-220.L. At most, the limit should be twice the daily loading at 1.0 MGD. Otherwise, you are authorizing the facility to operate at a dirtier level. **DEQ Response:** The previous permit included loading limits based on the same concentrations, but corresponding to a flow of 0.8 MGD. The draft loading limits are based on flows of 1.0 MGD and 2.0 MGD. The loading calculations have been reviewed and it was determined that the limits for the 1.0 MGD tier had been carried forward from the 0.8 MGD tier, and were incorrect. The correct loading calculations at the 1.0 MGD tier resulted in an increase of the limits, and the draft permit has been revised accordingly. Any apparent discrepancy in comparing the loading limits of the 2.0 MGD tier to the 1.0 MGD tier are due to the application of the agency's guidance for rounding and significant figures. Our modeling work indicates that the Water Quality Standards will be maintained at both flow levels. Public Comment: Given the fact that the TMDL study for fecal coliform has been initiated, the state should pursue the tightest possible limit on E. coli. The limit in Section B.4 should be dramatically reduced to the best achievable level. Fact sheet item 24 says that the area has not been identified as impaired under the 303 (d) TMDL Priority List. Given that the area is in fact impaired for fecal coliform, as is stated later in the background document, it is clear that this permit needs to reconsidered and reissued for comment after the need for a limit on fecal coliform has been addressed. **DEQ Response:** The E. coli limit in the permit is required to ensure compliance with the E. coli Water Quality Standard and is in accordance with the proposed TMDL. The proposed TMDL contains the same limit as the permit, based on the E. coli Water Quality criteria. The facility could discharge the maximum allowed by the permit, at the E. coli limit required, and still be in compliance with the E. coli Water Quality criteria. In practice, we have found that it is much more likely that the discharge will consistently have an E. coli concentration far below the limit. Although fecal coliform impairment is not used as a determining factor in designating the tier level of the stream, item #24 of the fact sheet has been revised to provide a discussion of the fecal coliform impairment. Public Comment: I&I studies and repairs should be spelled out as a required component of a proper O&M Manual for this STP. The O&M Manual specifications that are in the permit also

need to state the minimum required training of staff and the minimum staff coverage at the facility, with persons in attendance whenever high flow related to rain events occurs. Given the pattern of violations at the plant since that approval, the permit should not be issued until a revised and upgraded manual, including a plan for staffing and I&I control, is prepared and approved. In addition, that document should be made available for public comment before it is approved. **DEO Response:** The permittee is responsible for maintaining a current and approved O&M Manual. The Sewage Collection and Treatment (SCAT) Regulations and the O&M Manual special condition in the permit specify the minimum information that is required. However, the specified information does not typically comprise a complete manual. The items suggested in the comment are valid and are routinely considered when the O&M Manual is revised. The permittee has submitted to DEO for review a Short Term Process Control Plan to analyze the secondary clarifiers, to investigate modifications to facilities and operating procedures to address potential overflows, and to recommend a comprehensive strategy for control of the activated sludge process, including wet weather operation procedures. The modifications to facilities and changes in operating procedures, as well as the facility expansion, will require the submittal of an updated O&M Manual, in accordance with the SCAT Regulations and the permit, for review and approval by DEQ staff. The facility's O&M Manual is available for public review in Woodstock by contacting the Town office. It is also available in our office for public review at any time during public business hours. Public Comment: The obligation to report under Section F.2.b should include an obligation to report the required information whenever a new wastewater source (house, office building, business) is connected to the plant. **DEQ Response:** This requirement is presented in the draft permit in accordance with the Permit Regulation and current agency guidance. Our regulations do require Woodstock to notify DEQ of new connections to the plant involving gravity systems greater than 40,000 gpd and those involving pump stations. The permittee is responsible for ensuring that connections do not cause the STP or the sewer system to exceed its design capacity, and for ensuring that connections do not impact the STP's ability to adequately treat the wastewater or sludges. Detailed information on connections to the Town's sewer system is available in Woodstock by contacting the Town office. Public Comment: The permit should contain an obligation to provide electronic copies of all reports and plans to nearby community members, if copies are requested. **DEQ Response:** Under the Freedom of Information Act (FOIA), all documentation that DEQ has on file is part of the public record and is available to the public upon request. Under the FOIA, the Town is also required to provide information to the public upon request. We encourage interested citizens to work with the Town to get the most up-to-date information on the STP performance and sewer system connections. The Town maintains much more extensive records of these issues than we do. In addition to their own records, all information which is submitted to DEO by the Town is also available from the Town office. We have also encouraged the Town to post more information on their web site regarding the performance of their wastewater treatment facilities. **Public Comment:** The requirement to obtain a storm water permit or make a no-exposure certification described under item 21 of the fact sheet should be resolved before the permit is issued, and any stormwater requirements should be addressed directly in this permit. **DEO Response:** Coverage under the storm water general permit was issued on October 20, 2005. Consequently, the individual permit will not address storm water discharges from the STP site. Public **Comment:** The March 10 memo from Jason Dameron to the Permit Processing File titled "Flow Frequency Determination" states that the Strasburg gauge has been used to estimate the flow that actually occurs at the point of discharge for the Woodstock STP. The Strasburg gauge is about 30 miles down river from the Woodstock STP. It is clear that this assumption creates a gross error in the estimate of flow frequencies at the plant, which in turn results in relaxed limits for the Woodstock plant. The state must derive a more appropriate flow frequency estimate for setting limits in this permit by: Determining the contributions of runoff, other streams, and permitted dischargers between the plant and the Strasburg gauge; and correcting the Strasburg data for those other flows. If this cannot be done, the state should use a gauge upstream of the plant to represent flow at the plant, so as to assure that the limits in the permit adequately protect water quality. **DEQ Response:** Several flow measurements were conducted on the North Fork Shenandoah River from 1993 to 1999. These measurements were made approximately 1.5 miles downstream of the confluence with Stony Creek. The measurements were then correlated with the same-day daily mean values from the continuous gauge near Strasburg. The measurements correlated well with the continuous gauge near Strasburg. Due to the high degree of correlation, and the fact that four of the instantaneous flow measurements were greater than the same-day daily mean values at the continuous gauge near Strasburg, the associated High Flow 30Q10, Harmonic Mean,

and Annual Average flow frequencies at the measurement site were found to be greater than those from the gauge when the required flow frequencies were plugged into the equation of the regression line. The other flow frequencies were only slightly different, despite the difference in drainage areas between sites. The hydrologic conditions found may be attributed to the geological characteristics of the watershed and the relatively small drainage area of the tributary streams. It was determined that there is no significant difference between the flow at the Strasburg gauge and the measurement site; therefore, the gauge flows were applied directly to the discharge point, as in the previous permit. The flow statistics for this site are based on actual measurements, and are still considered to be the best available estimates. **Public Comment:** The modeling is based on a mixing zone length of about 4 miles. Anyone familiar with this stretch of river knows that this is a gross exaggeration of the true mixing zone. If necessary, "in river" studies should be conducted to get a more realistic estimate of the length of the mixing zone for this discharge. It is very likely less than half a mile. **DEO Response:** Stream characteristics were used in the MIX.exe model to determine the percentage of stream mix that would be allowed in a worst-case scenario. Since the mixing zone is likely to be much smaller than the length determined from the model, complete mix probably occurs much more quickly than suggested by our model, and no toxicity issues from insufficient mixing should result downstream. More rapid mixing would more quickly dilute the effluent, and this would result in a decreased potential for any toxicity impacts below the discharge point. Public Comment: Once these major deficiencies in the flow frequency analysis and impact modeling are corrected, the permit is expected to contain many more and stricter limits. It should be reissued for comment once the corrections are made. It will be particularly important to set proper limits on ammonia levels, as some scientists feel that the recent fish kill on this stretch of the river may be due to high ammonia levels. Even if the corrected flows and background levels do not lead to ammonia limits, it will be important to monitor and report ammonia from this source. Daily or weekly monitoring of ammonia should be required. **DEQ Response:** The DEQ staff believes that our flow frequency analysis and our mixing zone modeling are adequate and appropriate. Regarding ammonia monitoring, the frequency for the 2.0 MGD facility was set at 1/week, which is equal to that required for nutrients monitoring. The Total Nitrogen limits required in the permit will also serve to control the ammonia levels in the discharge. Although ammonia limits are not required at the 1.0 MGD flow tier, ammonia monitoring will be encompassed in the monitoring and calculation of Total Nitrogen. While ammonia is one of several suspects in the fish kills, none of our water quality data suggest that ambient levels of ammonia have reached concentrations that would cause toxicity. There is certainly no evidence that this discharge, or any individual point sources, were factors in the fish kills, since dead fish were reported throughout the full lengths of both the North Fork Shenandoah River in 2004 and the South Fork Shenandoah River in 2005. Changing the permit limits to respond to public comments received during the public notice period does not require that the facility rerun the public notice. **Public Comment:** The "Evaluation of Effluent Toxic Pollutants" starting on page 6 of Attachment D contains some major errors and deficiencies and must be done over with real data before this permit can be processed. The second paragraph says that there are no data on upstream toxics, so the analysis assumes they are all at zero. This assumption is not appropriate, reasonable or protective of the river. Either the data should be gathered before the permit is issued, or worst case, non-zero levels of toxics should be approximated, their derivation made part of the public record, and those estimates used in the toxics evaluation. The third paragraph says that "monitoring data is needed." That is an understatement. There are no data on the plant's effluent for most of the toxics. Pages 7 through 10 state that data on each toxic will be "required at reissuance" or "Monitoring will be required at reissuance." This is the time of reissuance. The data must be collected and used in a proper toxics evaluation before reissuance of this permit. Further, the adequacy of the biological monitoring that has been prescribed (through tests of fleas and minnows) is unknown, and it may be inadequate, depending on the toxics that are found upstream and/or in the discharge. This river has experienced a major fish kill in recent years, and we will not know if this discharge is a potential cause if the state does not do the proper analysis of toxics. To assume zero background and not evaluate pollutants because they have not been measured is an unacceptable sidestep of an important part of the permitting process that is absolutely necessary to protecting the river's water quality. **DEO Response:** Based on monitoring which has been conducted at other STPs, most of these pollutants are rarely present in measurable concentrations in STP effluents or in ambient water; therefore, we do not consider it unreasonable to assume that the pollutants are not measurably present in this case. Nevertheless, the proposed permit requires a scan, at the time this STP expands its design capacity, for all Water Quality Standards pollutants that are either new or have

not previously been evaluated. The proposed permit also includes a requirement to begin toxicity testing, starting with the effective date of the reissued permit. These requirements will provide data to confirm whether the discharge has any potential to impact downstream aquatic life. During the period of March to September 2005, DEQ conducted weekly nutrient sampling in the North Fork Shenandoah River near the mouth of Pugh's Run and several miles downstream, primarily in response to the 2004 fish kill, and no levels of concern were noted. Public Comment: The TKN value analysis has several deficiencies. First, it assumes that Woodstock STP concentrations are less than 20 mg/L. It should not be assumed. Background TKN is assumed to be zero. This is also inappropriate. Any needed monitoring of the effluent and the background should be done before the permit is issued. Further, the total nitrogen limit should be imposed now rather than waiting until the expansion occurs. The expansion may not occur in a timely manner, and there is no enforceable deadline for that expansion in this permit. Lastly, the modeling was concluded at the confluence of Pughs Run. The modeling should be extended beyond that point to evaluate the composite impact of the Pughs Run flow and this source. **DEQ** Response: Based on the Regional Stream Model, it was determined that no TKN limit was needed at the 1.0 MGD flow tier. Conventional secondary sewage treatment plants rarely discharge effluent concentrations greater than 20 mg/L. For this reason, a "worst case" assumption was made to use 20 mg/L in the model, in accordance with current agency guidance. Also, the upstream data that we have collected shows TKN concentrations averaging < 0.3 mg/L. At the expansion tier, no TKN limit is required, as the TKN will be limited by the Total Nitrogen limit. Based on the Regional Stream Model at the 1.0 MGD tier, the dissolved oxygen levels in the stream have returned to background levels by the confluence with Pughs Run. At the 2.0 MGD flow tier, the dissolved oxygen levels are continuing to rise at the confluence with Pughs Run and are in compliance with the dissolved oxygen sag requirement of no more than a 0.2 mg/L drop from background. With the additional flow entering from Pughs Run, the dissolved oxygen levels will reach or exceed the background levels upstream of the discharge point, even if drought flow occurs simultaneously with the other unlikely design modeling conditions. Prior to the confluence with Pughs Run, the in-stream cBOD₁₁ and nBOD₁₂ values are insignificant at the 1.0 MGD tier, and are approaching background levels at the 2.0 MGD tier. Therefore, it was not necessary to continue the model past the confluence with Pughs Run. Public Comment: The Consent Order and draft permit should be presented to the Board at the same time. **DEQ Response:** We concur. **Public Comment:** The town must implement the recommendations in their contractor's infiltration & inflow study. unless the town can demonstrate to DEQ that a certain recommendation is not technically feasible. **DEQ Response:** A proposed revised Consent Order has been presented to the Town of Woodstock that would require the town to implement the recommendations for additional I&I studies and remediation work on the collection system, as proposed in its January 3, 2006, I&I study report. Presently, the town is evaluating the proposed revisions to the Consent Order. Public Comment: The town must limit the number of new hook-ups to ensure that the true operating capacity of the plant, at any time between now and the completion of the upgrade, is not exceeded in a wet year, and that demonstration should be made in writing, available to the public. **DEQ Response:** The proposed revised Consent Order would require the town to take immediate action to limit further connections to the collection system should the facility exceed 95% of its permit's design capacity for three consecutive months, or for four or more months in a six-month period until the new upgraded/expanded facility comes on line. Presently, the town is evaluating the proposed revisions to the Consent Order. Public **Comment:** One or more operators must be present at the plant at all times, so that any operating problems are promptly identified and addressed. **DEO Response:** The Town of Woodstock is currently working with DEO Inspections staff to update their Operations and Maintenance Manual, including operator staffing at the facility. The Sewage Collection and Treatment regulations recommend that a licensed operator be present at the facility 8 hours per day, and that the facility be manned 16 hours per day. The staff intends to maintain a requirement for this level of staffing via the O&M Manual.

Massanutten Public Service Company, Rockingham Co., Consent Special Order with Civil Charge: The September 1, 2004, Amendment to the 2002 Order provided additional time for Massanutten to submit approvable as-built plans and specifications and complete construction of the Facility upgrade including the second flow equalization basin. The Amendment required Massanutten to submit approvable plans and specifications for the upgraded Facility by January 31, 2005. Following Massanutten's signing the Amendment on July 6, 2004, it submitted numerous versions of the as-built plans and specifications both before and after the

January 31, 2005 due date for submittal of approvable plans and specifications. DEO issued a NOV on May 10, 2005, to Massanutten for violations of the Amendment including failure to submit approvable as-built plans and specification for the upgraded Facility. Massanutten has been in compliance with the Permit's effluent limitations since May 2003. On June 16, 2005, DEQ met with Massanutten in an informal conference to discuss the NOV and resolution of the outstanding issues and violations. By letters dated July 8 and September 15, 2005, Massanutten submitted to DEQ a revised plan and schedule of compliance for completion of the Facility upgrade. Sections of this plan and schedule have been incorporated into Appendix A of this Order. Massanutten has made substantial progress in completing the upgraded Facility, but it did not submit approvable plans and specifications by January 31, 2005 or request a conditional CTO by February 28, 2005, as required by the Amendment. On September 16, 2005, Massanutten reported and DEQ investigated an unpermitted discharge of activated sludge to Quail Run. On September 19, 2005, during the follow-up inspection of the sludge spill, DEQ observed activated sludge in the stream for approximately 1000 feet downstream of the Facility. Massanutten indicated that an estimated 60,000-80,000 gallons of mixed liquor was lost in the event and that a small fish kill was noted during the cleanup of the stream. The release occurred when tape covering the end of a drain line for an activated sludge basin gave way. Apparently, this drain line was taped and buried to protect it during the Facility's construction, but unlike the other six drain lines, it was never uncovered to properly install a valve and valve box. Massanutten completed the cleanup of the activated sludge in the stream and installed the valve and valve box. On October 28, 2005, Massanutten reported to DEQ a break in a force main that led to an unauthorized discharge of approximately 200 gallons of wastewater/sewage to surface waters. This discharge was apparently composed primarily of backwash water from the water treatment plant with some raw sewage. Massanutten took prompt action to cleanup the spill and repair the line. On November 1, 2005, Massanutten submitted to DEQ for review and approval another version of the as-built plans and specifications for the Facility upgrade. To date, however, Massanutten has not received a CTO for the Facility upgrade required by the Amendment. On November 9, 2005, DEO issued a NOV to Massanutten citing the September 16, 2005, unauthorized/unpermitted discharge of solids with an adverse impact on water quality and the September 26, 2005, unauthorized discharge of wastewater. On November 22, 2005, Massanutten diverted approximately 0.5 MG of wastewater to the new EQ basin which is presently under construction. On November 29, 2005, Massanutten experienced unauthorized/unpermitted discharges of wastewater from the Facility and Massanutten again diverted approximately 0.5 MG of wastewater to the new EQ basin. The use of the EQ basin has not been authorized through the issuance of a Certificate to Operate since the unit is still under construction. Massanutten asserts that the diversions were necessary due to high rainfall events and were more environmentally protective since the actions prevented or limited the overflow of wastewater from the treatment plant. On January 3, 2006, Massanutten began the unauthorized operation (before receiving a CTO) of the Facility's second treatment train. Massanutten asserts that the use of the second treatment train was necessary to treat higher influent flows and compensate for operational problems and that its use would reduce the time the EQ basin would be utilized so that the EQ basin work could be completed more expeditiously. The proposed Order, signed by Massanutten on January 17, 2006, would require Massanutten to complete the construction of the second equalization basin to complete the full Plant upgrade, close out the old unused lagoon and complete certain I&I corrective actions. The Order would also include a civil charge. Civil Charge: \$19,700

Town of Chase City, Mecklenberg Co., Consent Special Order with a Civil Charge: From mid 2002 through mid 2004, Chase City exceeded permit effluent limits on a chronic frequency. The Town attributed nearly all of those violations to one industrial user thus it became apparent that the Town needed a pretreatment program. In the fall of 2002, as part of an economic development package to this industrial user, the Town was granted over \$700,000 through Mecklenburg County economic development for pretreatment works. The pretreatment works were to be placed at the industrial user's facility; however, the industrial user ceased production in 2004 thus eliminating the need for pre-treatment. Chase City has experienced only a few minor effluent limit violations since closure of the industry in 2004. DEQ's inspections of the facility have identified reoccurring issues of improper operation and maintenance ("O&M") including an unauthorized discharge from the headworks of the facility. As of November 2, 2005, the unauthorized discharge had been eliminated and the necessary physical improvements to the facility had been made. The Order requires Chase City to perform and document certain

facility maintenance and process control measures in order to ensure consistent compliance with the terms of the permit. Civil Charge: \$5,180.

C.R. Beard d/b/a/ Red Hill MHP, Prince George Co., Consent Special Order with Civil Charge: The Department issued a Consent Order to Red Hill on June 26, 2003. The Order required Red Hill to submit an updated operation and maintenance manual, reduce sludge inventory in the clarifiers, complete requirements for financial assurance, submit a corrective action plan (CAP) for a treatment system upgrade, and payment of a \$5,700 civil charge. Several CAPs were submitted that were unacceptable. A CAP with a schedule was approved and required compliance with the permit in November 2004, however the upgrade plan was never fully executed and Red Hill is still not capable of meeting limits without further repairs to the treatment plant. Red Hill's operator submitted a Groundwater monitoring plan in September 2004 that the Department determined was unacceptable. On December 17, 2004, the Department issued a NOV to Red Hill citing them for the failure to submit a groundwater monitoring plan. On September 30, 2005, the Department issued a NOV to Red Hill citing them for the failure to submit a groundwater monitoring plan, for pH (in June and July 2005) and DO (in July 2005) effluent violations, and for bypasses in May and June 2005. Red Hill has hired a new treatment plant operator who is in the process of developing a list of needed maintenance items for the plant. This list expands the scope of work required in the November 2004 Department approved CAP. If compliance is to be achieved at this facility, the plant will need to be upgraded. It is estimated that the cost of required improvements will be approximately \$30,000. The Department met with the owner, park manager and the new operator on January 12, 2006. All three stated that the problems with the plant are due to neglect from the former operator. Since September 1, 2005, the new operator has made a number of operation changes and repairs and no additional violations have occurred. Civil Charge: \$10,800.

Doswell All-American Travel Plaza, Hanover Co., Consent Special Order with Civil Charge: Doswell All-American Travel Plaza includes a truck fueling facility, truck service bays, truck wash, truck scales, a motel, a restaurant, and a truck parking area. Stormwater from the site flows from paved areas to an oil-water separator, followed by a constructed wetland stormwater management facility. This stormwater discharge is permitted under a Virginia Pollutant Discharge Elimination System ("VPDES") permit. On multiple site visits from June 2004 through September 2005, DEQ staff observed a petroleum product sheen in the stormwater management facility and the downstream tributary. During an AST inspection on September 9, 2004, staff observed deficient AST recordkeeping, operation and maintenance. Staff attempted to resolve the petroleum release and AST issues informally, however the facility did not respond in a timely manner. On September 13, 2005, DEQ staff conducted a VPDES permit inspection and found that the oil/water separator was not being appropriately operated or maintained. On November 1, 2005, the Department issued a Notice of Violation (NOV) to All American Plazas, Inc. for the compliance issues described above. Department staff and representatives from All American Plazas met on November 17, 2005, to discuss the compliance issues at the facility. A schedule for corrective action was agreed upon during the meeting. The proposed Order requires replacement of the oil water separator and a 6-month period of observation to ensure that the petroleum discharge has been eliminated.. The Order also requires interim measures to protect downstream resources during this period, a report on the replacement of the oil/water separator, and correction of an AST area drainage problem. All other compliance issues were corrected prior to the draft Order. Replacement of the oil water/separator and fulfillment of the requirements of the Order will cost approximately \$40,000. Civil Charge: \$15,000.

Tyson Foods, Inc., Hanover Co., Consent Special Order with Civil Charge: On August 2, 2005, Department personnel observed a fish kill at a stream station located approximately 0.5 miles downstream of Tyson's discharge. One hundred dead fish were observed, 90 largemouth bass and 10 sunfish. During the fish kill events, Tyson experienced several operation failures at the wastewater treatment facilities. On August 19, 2005, Tyson reported a failure of the dissolved air flotation (DAF) unit. On August, 23, 2005, Department personnel observed another fish kill at a stream station located approximately 0.3 miles downstream of Tyson's discharge. A DO reading of 0.7 mg/L was recorded at this station. On August 24th Department personnel walked the stream bank from the station to the Tyson discharge and counted 65 dead sunfish. Photographs and field measurements taken at that station indicate that the fish likely died as a result of ammonia toxicity. On August

25, 2005, Tyson reported a sand-filter pump failure. The sand-filter was bypassed from August 28th through the 30th, resulting in effluent violations. On September 10th Tyson reported effluent violations of BOD, TSS total suspended solids, total phosphorous and ammonia nitrogen on the August 2005 DMR. On November 2, 2005, the Department issued an NOV to Tyson citing them for the two fish kills, the effluent violations, and a late DMR. The Department met with Tyson on December 12, 2005, to discuss the NOV. Tyson took responsibility for the fish kills and the water quality concerns and expressed a desire to move forward to repair the DAF and come back into compliance with its permit. Tyson outlined their plan during the meeting and portions of the plan with a schedule are incorporated into the Order's appendix. The cost of improvements is approximately \$43,000. There were 165 dead fish with an estimated replacement cost of less than \$50 and the Department did not incur any appreciable investigative costs because staff were already on location conducting routine sampling. Based on this, recovery of fish kill replacement and investigation costs were not included in the Order. Civil Charge: \$25,700

Town of Warsaw, Richmond Co., Consent Special Order Amendment: On March 24, 2004, the Department issued a Consent Order to the Town of Warsaw for an unauthorized discharge of sewage, failure to meet the permit compliance schedule for copper and zinc, and effluent violations of ammonia and TSS. The Order required the Town to submit plans for a construction upgrade by October 1, 2004, secure financing for the upgrade, begin construction on February 1, 2005 and complete construction and comply with permit limits on November 1, 2006. The Order also contained interim limits for TSS, ammonia, copper, and zinc. During the term of the Order a new more stringent permit ammonia requirement and new nutrient regulations for Chesapeake Bay dischargers are causing the Town to reevaluate their upgrade plan. On April 5, 2005, the Department issued an NOV to the Town for interim zinc violations from December 2004 through February 2005, and Warsaw reported additional interim zinc violations on DMRs for the March through June 2005 monitoring periods. The numbers reported were marginal with all of them falling within 10% of the Order's interim limit. This amendment contains interim limits for copper, TSS, and ammonia which are carried over from the previous Order. The zinc interim limitation was adjusted to include zinc data obtained during 2005. The Town estimates that the upgrade project will cost about \$1,000,000 and be complete in three years once construction starts.

Cardinal Realty d/b/a Cardinal Stone-Galax Quarry, Galax, Consent Special Order with Civil Charge: DEQ staff, responding to a pollution complaint, discovered that Cardinal Stone was discharging sheet flow runoff from several areas of their quarry site in Grayson County. A site investigation and benthic survey revealed that large amounts of materials (limestone fines and sediment) were being lost from the site and that control mechanisms were not in place to prevent the loss of materials. Streams in the area were impacted both physically (sedimentation) and biologically (moderate biological impact). Cardinal Stone is subject to VPDES General Permit for Nonmetallic Mineral Mining (Permit) and is covered under Registration Statement No. VAG840054. The Permit has two registered outfalls (001 and 002). The staff investigation found that large amounts of materials were being washed from areas of the site not covered by the permit. To remedy these violations, staff negotiated the proposed Consent Special Order. Cardinal Stone modified its registration statement to include outfalls 003, 004, and 005. The proposed Consent Special Order requires Cardinal Stone to, among other things, 1) report any unusual or extraordinary discharge as quickly as possible but no later than 24 hours after the event, 2) maintain all temporary control structures that are now in place until completion of permanent control structures 3) modify the sediment basin at Outfall 001, install a sediment basin at Outfall 003 and 004, and enlarge the sediment basin at Outfall 005, 4) monitor and seed disturbed areas of the site, 5) implement monitoring and cleanout schedules for the sediment control structures and 6) pay a \$7,500 civil charge. Civil Charge: \$7,500.

BASF Corporation, Portsmouth, Consent Special Order with Civil Charge: The BASF – Portsmouth facility manufactures superabsorbent material for industrial and commercial use. VPDES Permit No. VA0003387 was issued to BASF on July 6, 2005 authorizing discharges from outfalls 001 (process wastewater and stormwater) and 002 (regulated industrial stormwater). The previous VPDES permit expired April 19, 2005 and was administratively continued until the current permit was issued. On May 18, 2005 treated water from a polishing

pond was being re-circulated to a storm water pond. Reportedly this operation was conducted during the night without a full time attendant. A hose connected to the circulation pump failed and discharged approximately 50,000 gallons of water with high levels of zinc and nitrogen through a nearby fence and onto adjoining property, which eventually drained to the Elizabeth River. Reportedly 20,000 gallons was recovered via vacuum hose system; approximately 30,000 gallons of this unpermitted discharge entered into the River. The water in the polishing pond had been pumped from a constructed wetland, built to remove zinc from stormwater. The constructed wetland was not yet in operation, and water was being removed to repair damage from a storm. Part of the damaged constructed wetlands consisted of compost, reportedly releasing high amounts of nitrogen into the pond water. Samples taken from the pond water following the discharge had results of 130mg/l nitrogen, over the regulatory standard of 10mg/l (there are no nitrogen limits in its VPDES permit). BASF was advised of the above findings in a Notice of Violation issued on June 10, 2005. BASF reported the discharge in accordance with its permit and responded to the spill upon discovery to contain and recover as much of the release as possible. The order requires BASF to pay a civil charge. A BASF responsible party executed the order on December 2, 2005, and BASF is currently in compliance with the order. Civil Charge: \$7,000.

BBB, LLC, Chesapeake, Consent Special Order with Civil Charge: BBB, LLC ("BBB") owns and leases a 94 acre waterfront industrial park which includes Waterway Recycling ("Waterway"), a construction and debris recycling facility. On July 15, 2005, DEQ Staff ("Staff") conducted an inspection of the facility in response to an anonymous compliant which was received by DEQ on July 15, 2005, regarding an apparent discharge to the Elizabeth River near the facility. The inspection revealed that Waterway had previously unloaded a barge containing BauxsolTM ("Bauxsol"). Bauxsol is the trade name for aluminum depleted bauxite, a reddish pasty solid or granules with low hydraulic conductivity that is mainly used for the treatment of acid or metal. During the inspection staff observed a red tint at the Waterway storm water drop inlets, at the storm water retention pond, and a red tint plume in the Elizabeth River. Red Bauxsol powder was also observed tracked off site on the street. During the site visit BBB stated that they were not aware of the discharge prior to the site visit. On July 19, 2005, Staff conducted a follow-up inspection at Waterway. Although a discharge was not observed from the facility's storm water retention pond, Bauxsol was seen in the storm water retention pond, in the storm water from the drop inlets between the warehouse and the bulkhead discharge to the storm water retention pond, and in the drop inlet grates. On July 27, 2005, DEQ issued a Notice of Violation ("NOV") advising of the unpermitted discharge. On August 5, 2005, BBB responded to the NOV indicating that the Bauxsol was accepted by BBB as a one time test and it has no long-term agreement to accept or distribute the material. On November 18, 2005, DEQ met with BBB's representatives to discuss the above referenced NOV. During the meeting BBB stated that corrective measures have been implemented at the facility to prevent or minimize pollutants in storm water discharges specifically, storm water oil separators and trench drain and inlet ditches to the storm water retention pond have been washed and vacuumed to remove any Bauxsol that may have been collected through spillage and rain water flow; all storm water drop inlets have been fitted with a filter cloth underneath the grates to capture any soil or debris; and gravel berms have been established around certain drop inlets. Additionally, BBB provided documentation indicating that the residual Bauxsol has been cleared from the drop inlet grates, the storm water retention pond and internal outfalls. The Order would require BBB to pay a civil charge within 30 days of the effective date of the Order. BBB signed the Order on January 4, 2006. Civil Charge: \$3,500.

Robert L. Magette, Isle of Wight Co., Consent Special Order with Civil Charge: Mr. Magette owns and operates the Carrollton Court wastewater treatment plant that serves a small housing complex of 14 single-family homes. On March 15, 2005, DEQ Compliance Staff ("Staff") conducted a routine inspection of the facility and observed and documented that the overall condition of the facility was poor, with treatment process equipment either not working or not maintained, the operator was not performing and/or documenting the operation and monitoring tests as required by sections four and six of the approved Operation and Maintenance ("O & M") Manual, and the plant was being run by an operator in training with limited oversight by the contract operator. Staff conducted analysis of the facilities effluent for total kjeldahl nitrogen ("TKN") and total suspended solids ("TSS") which indicated exceedances of the maximum concentration for both TKN and TSS. Staff noted that laboratory procedures and equipment at the plant did not reflect the laboratory procedures and

equipment outlined in the approved O & M Manual. In addition, between November 2004 and April 2005, Mr. Magette submitted to DEQ, discharge monitoring reports which indicated exceedances of the maximum and average loading and concentration limits for TSS, TKN, carbonaceous biochemical oxygen demand, and fecal coliform. On April 25, 2005, DEQ issued a Notice of Violation ("NOV") advising Mr. Magette of the above referenced deficiencies and Permit limit exceedances for TSS, TKN, and carbonaceous biochemical oxygen demand. On May 10, 2005, DEQ issued an NOV advising Mr. Magette of the Permit limit exceedance for fecal coliform. On May 11, 2005, DEQ received a response to the NOV issued April 25, 2005, from the contract operator on behalf of Mr. Magette. The response outlined a timeline for corrective actions. To date, DEQ does not have documentation that these items were completed. The proposed order would require Mr. Magette to update the O & M Manual to reflect the current facility operations, provide training to the operator in training, develop and submit to DEQ a corrective action plan and schedule to repair/replace malfunctioning treatment process equipment, address the effluent limit violations to ensure compliance with the Permit requirements, and pay a civil charge within 30 days of the effective date of the order. Mr. Magette signed the order on November 29, 2005. Civil Charge: \$5,500.

Oceana Salvage, Inc., Virginia Beach, Consent Special Order with Civil Charge: Oceana Salvage, Inc. ("Oceana") owns and operates an auto salvage and scrap material recycling facility. Oceana is subject to VPDES General Permit for Storm Water Discharges Associated with Industrial Activity No. VAR05 ("Permit") through Registration No. VAR050409, which was issued July 30, 2004 and expires on June 30, 2009. The Permit authorizes Oceana to discharge storm water associated with industrial activities via outfall 001. On April 13, 2005, DEQ inspection staff ("Staff") conducted a routine inspection of the facility and documented deficiencies, which included: (a) quarterly visual examinations of storm water quality and required routine site inspections were not performed and/or documented; (b) the comprehensive site compliance evaluation ("CSCE") for calendar year 2004 was not available for review at the time of inspection; (c) employee training was not performed; (d) exposed waste materials stored on the ground with no protective cover or shelter; (e) exposed oily automobile parts were observed in two of the dismantling areas; (f) a pool of oil was observed under the car crusher which was leaking due to a broken containment structure surrounding the car crusher; (g) woodchips under the car crusher used for absorption were saturated with oil; (h) petroleum contaminated soils were observed adjacent to a former containment structure. DEQ issued a Notice of Violation ("NOV") on May 3, 2005, advising Oceana of the inspection report, which included the above referenced deficiencies. Since issuance of the NOV and initiation of the enforcement action, Oceana has provided documentation indicating that considerable site improvements have been made and Oceana has made a good faith effort to address the deficiencies referenced in the inspection report. In addition, Oceana informed DEQ that as of November 1, 2005 the operation of the facility and the registration had been transferred to a new operator. The Order would require Oceana to pay a civil charge within 30 days of the effective date of the Order. Oceana signed the proposed consent special order on December 30, 2005. Civil Charge: \$3,500.

Perdue Farms, Inc., Accomack Co., Consent Special Order with Civil Charge: Perdue Farms Incorporated ("Perdue") owns and operates a poultry-processing complex on the Eastern Shore. Perdue is subject to VPDES Permit No. VA0003808, which authorizes Perdue to discharge treated wastewater (processing plant effluent and sanitary wastes), and stormwater runoff. The complex is categorized as an industrial major facility. Perdue is subject to a June 26, 2003 Consent Special Order addressing treatment plant malfunctions, unpermitted discharges, and permit limit exceedances of ammonia, total suspended solids, and whole effluent toxicity ("WET"). The order required Perdue to upgrade the wastewater treatment plant and conduct monthly WET tests for six months upon completion of the upgrades. Perdue completed the treatment plant upgrades in January 2005 and is in compliance with the terms of the order. Perdue reports that the wastewater treatment plant upgrades have significantly improved the wastewater discharge; however, the upgrades have not resolved all VPDES permit limit exceedances. Specifically, the WET permit limit was exceeded in May, July, and November 2005 and the biochemical oxygen demand permit limit was exceeded in July and August 2005. DEQ advised Perdue of the above permit limit exceedances by Notices of Violation dated July 12, 2005, September 23, 2005, and December 16, 2005. The proposed Consent Special Order supersedes and replaces the June 26, 2003 Consent Special Order and would require that Perdue evaluate toxic sources and implement modifications

to reduce toxic sources and comply with the WET permit limit by June 30, 2006. In addition the proposed order allows for extension of this schedule based on petition and approval by DEQ. Purdue must demonstrate successful completion of the corrective actions by conducting monthly WET tests for six consecutive months. Perdue signed the order on January 18, 2006. Civil Charge: \$18,300.

TCS Materials, Inc., Chesapeake & Virginia Beach, Consent Special Order with Civil Charge: TCS Materials, Inc. ("TCS") owns and operates ready-mixed concrete plants and is subject to the permit through Registration No. VAG110035 for the Gilmerton facility, and Registration No. VAG110059 for the London Bridge facility. TCS is required to sample and monitor storm water discharges at five storm water outfalls at the Gilmerton facility and two storm water outfalls at the London Bridge facility and submit reports of annual storm event monitoring ("annual report") to DEQ by the tenth day of January each year. On or about January 10, 2005, DEO compliance staff conducted a review of agency files and determined that DEO did not receive the annual reports from TCS for the 2004 reporting period for the referenced facilities. On February 16, 2005, DEQ issued warning letters to TCS notifying TCS that the required annual reports for the Gilmerton and London Bridge facilities were not received by DEQ. Additionally, the warning letter included a deadline of May 1, 2005 for TCS to submit the required annual reports for the 2004 reporting period for both facilities. DEQ did not receive the annual reports for the facilities. DEQ staff again reminded TCS of the necessity to sample and submit annual reports during a routine inspection of the London Bridge facility, performed on April 6, 2005. On August 9, 2005, DEQ issued Notices of Violation ("NOVs") to TCS regarding the Gilmerton facility and the London Bridge facility, advising TCS of the outstanding annual reports. DEQ did not receive the outstanding annual reports from TCS for either the Gilmerton or London Bridge facilities nor did it receive any indication that required annual sampling had been performed. DEQ received the 2005 annual report on September 9, 2005 for the Gilmerton facility and on December 7, 2005 for the London Bridge facility. The Order would require TCS to pay a civil charge within 30 days of the effective date of the Order. Civil Charge: \$7,000.

Town of Culpeper, Culpeper Co., Consent Special Order Amendment with Civil Charge: A Consent Special Order was issued to the Town of Culpeper ("Town") on June, 21, 2004 ("2004 Order") for exceedences of permit effluent limits for ammonia, total suspended solids (TSS), dissolved oxygen, whole effluent toxicity (WET), and chlorine parameters. The Culpeper WWTP was undergoing a \$4.1 million rehabilitation project to allow the facility to better handle high flows. The Town attributed the permit limit exceedences to construction activities and high flows through the plant. The 2004 Order required the Town to complete construction of the upgrade by August 1, 2004. DEQ received a letter on August 30, 2004 stating that the project had been substantially completed as of August 26, 2004. However, a Certificate to Operate (CTO) could not be issued at that time because design problems with the new rotating disk filter did not allow it to handle peak flows. On May 25, 2005, DEQ received another letter certifying substantial completion had been achieved as of May 17, 2005. However, the letter also stated, "To enable the Project to become fully operational, the Town of Culpeper must remove sludge (relocated from equalization lagoon 1 to facilitate the construction schedule) from equalization lagoons 2 and 3 and install two floating aerators." The excessive sludge in the plant and high flows have been identified by the Town as the reasons for multiple permit limit exceedences for ammonia, pH, and chlorine from December 2004 through August 2005. By letter dated February 7, 2005, the Town notified DEQ that the WWTP had exceeded 95% of the rated plant capacity in each of the previous three months. The Town has identified the causes of the excess flows to be ongoing development in and around the town and substantial inflow and infiltration into the collection system. The proposed Amendment to the 2004 Order requires the Town to: (1) complete the work necessary to finish the rehabilitation project that was required by the 2004 Order; (2) complete a Sewer System Evaluation Study and submit a plan and schedule to reduce I/I; and (3) complete an upgrade and expansion of the plant in order to ensure consistent permit compliance. Civil Charge: \$10,000.

Fauquier County WSA, Vint Hill Farms WWTP, Consent Special Order: Vint Hill Farms WWTP is a 0.246 MGD plant that is located in Fauquier County, Virginia and treats wastewater and sewage from the homes and businesses that have been developed on and surround the former Army operations base. In 2000, the Fauquier County Water & Sanitation Authority ("Authority") assumed ownership of the WWTP from the U.S. Army

upon closure of its base known as Vint Hill Farms Station. The Authority was referred to enforcement on July 7, 2005 for permit effluent limit violations, mostly for Ammonia, and a late submittal of a report. The WWTP currently utilizes trickling filter technology that cannot meet the permit effluent limits for Ammonia that were imposed for the first time subsequent to construction of the WWTP. Therefore, the WWTP has periodically exceeded, and absent substantial modifications will continue to exceed, monthly concentration average limits and weekly concentration maximum average limits for Ammonia. During this recent period of non-compliance, the Authority consulted with the Virginia Rural Water Association to discuss ways to bring WWTP back into compliance. The Authority fed lime into the primary effluent before the trickling filter dosing box to increase alkalinity and pH. After achieving those higher levels they started feeding Microbe-lift (cultured microorganisms) that are designed to help increase media growth to reduce the amount of untreated Ammonia that would pass through the trickling filter and ultimately into the effluent. The Authority also relocated the Alum feed point from the headworks to the trickling filter pump station to increase the organic loading to ensure the micro-organisms had an adequate food supply. None of these changes brought about a noticeable reduction in the Ammonia levels. DEQ met with the Authority on August 18, 2005 to discuss these compliance issues and further options to bring the WWTP back into compliance. At the meeting the Authority stated that they had also considered increasing air circulation through the trickling filter and using break point chlorination as a treatment method, but determined that those options were not feasible based on current plant design. Since the Authority explored all of its feasible options with respect to modifying the current plant, they decided to go forward with a plant upgrade to meet all permit effluent limits including Ammonia. The Authority signed a construction agreement with English Construction on August 5, 2005 with an aggressive construction schedule to substantially complete an upgrade of the WWTP by November 3, 2006.

Town of Hamilton, Loudoun Co., Consent Special Order: The Town of Hamilton ("Town") STP is a 0.16 MGD plant that is located in Loudoun County, Virginia and treats wastewater and sewage from the residents of the Town of Hamilton and a portion of the surrounding County. DEO reissued the Town's permit effective November 29, 2000. The Town was sent a permit renewal application on October 4, 2004 that was due on May 29, 2005. The Town asserts that they lost the first application and requested a new one on July 7, 2005. The Town has also consistently exceeded monthly concentration averages and weekly concentration maximum averages for Copper. Furthermore, the Town discontinued use of its chlorination/dechlorination system and used a Ultra-violet (UV) disinfection system without a Certificate to Operate ("CTO"). The existing STP is a patch-work treatment system that is aging. Because of the age of the Town it was assumed high levels of Copper are coming from copper piping in the homes. As currently designed and operated, the STP cannot reduce elevated levels of Copper in the influent to meet permit effluent limits. DEQ met with the Town and their consulting engineers, Waste Water Management, Inc., ("WWM") to discuss the Copper compliance issues, the online UV system, and the permit application. Subsequently, the Town has received a CTO for the UV system and will be making changes to the O&M manual to reflect the change. In addition, the Town submitted the permit application on August 17, 2005. WWM submitted a Copper Study and Control Plan ("Plan") to DEQ for approval on August 31, 2005. The Plan was approved by DEQ on September 2, 2005 and consisted of testing to determine the source of the Copper in the influent and optimum types of treatment alternatives to reduce it. Testing revealed that Copper was present in significant amounts in the distribution system, which signified corrosion from domestic piping. The Town has committed to taking two interim steps to decrease the level of Copper in the effluent. The first being an increase of the soda ash dosage to certain wells in order to increase the aggressive index of the treated water to reduce the influent Copper level. The second being an addition of a chemical precipitant to the treatment process to further lower the Copper found in the effluent. The proposed Order requires the Town to submit a report detailing whether the Plan and the corrective actions have enabled the STP's effluent to consistently meet permit limits. If the report shows significant improvement, then the Town must make permanent modifications to the treatment system pursuant to the timeline in the schedule of compliance. However, if the report shows that the interim modifications have not enable the STP to consistently meet permit effluent limits, then the Town must submit a schedule for a major upgrade of the STP.

The Madeira School, Inc., Fairfax Co., Consent Special Order with Civil Charge: The Madeira School, Inc. (Madeira) owns and operates a wastewater treatment plant (WWTP) at the Madeira School. Although the

WWTP was upgraded in 1996, its attached growth system of trickling filters is often inadequate to effectively treat the wastewater generated by this full-service boarding school. Fixed film treatment systems such as trickling filters do not allow for total removal of ammonia and the break-point chlorination system currently used is often ineffective at removing the remaining ammonia, and adds excessive amounts of chlorine. The grease from the dining hall waste also interferes with the removal of BOD and ammonia. TSS violations result from problems with the secondary clarifier, such as the inadequate slope of the tank bottom. Madeira prepared an engineering report in January 2005 that presented recommendations for both short- and long-term improvements. Recommendations for short-term improvements included: upgrading the tablet-style dechlorination chemical feed system to a liquid sodium bisulfite feed system, providing new secondary clarifier sludge pumps for consistent sludge removal and improved treatment efficiency, and installation of a septic tank or grease interceptor to prevent the release of grease and oils produced from food preparation facilities into the sewer system. Recommendations for long-term improvements included: the construction of a new wastewater treatment facility using a Sequencing Batch Reactor and hooking up to the Fairfax County sewer using a pump station and force main. By October 2005, Madeira had begun installation of a grease trap to provide some improved treatment. Madeira submitted a plan and schedule that incorporated both the short- and long-term recommendations to be included in this Consent Order. Special circumstances at the site include spatial constraints, and the federal requirement for an Environmental Impact Statement, as Fairfax County sewer connection (if selected) will likely be through National Park Service land. The Order requires Madeira to complete construction related to short-term improvements by August 1, 2006 and to begin appropriate studies to determine if connection to Fairfax County is possible, or if onsite wastewater treatment will be required by April 1, 2006. A decision regarding which long-term recommendation will be implemented will be due by March 1, 2007. Project design related to the long-term improvement will begin by May 1, 2007 and long-term plans and specifications will be submitted by February 1, 2008. Within 18 months of DEQ approval of plans and specifications, Madeira will complete sewer line connection or treatment plant construction and gain full permit compliance within 60 days of completion. Madeira will also be required to comply with an interim limit for ammonia during the plant improvements. Civil Charge: \$8,120.

Oak Grove Mennonite Church, Madison Co., Consent Special Order Amendment with Civil Charge: A Consent Special Order was issued to Oak Grove Mennonite Church ("Oak Grove") on December 14, 2000 ("2000 Order") for Mountain View Nursing Home STP ("STP") to address permit effluent violations. Oak Grove's aerated lagoon system has consistently failed to meet permit effluent limits for biochemical oxygen demand (BOD), total suspended solids (TSS), and ammonia. The 2000 Order sought to address these violations in two phases. Phase I was a plant upgrade which consisted of adding floating aerators and a chlorination/dechlorination vault in anticipation that those changes would enable the STP to meet permit limits. Oak Grove was in compliance for approximately a year after those slight modifications, except for a few minor operator error problems. At the end of the one-year period, permit violations began occurring again in December 2002 and continued into 2003. Oak Grove was again referred to enforcement on February 4, 2003. An Amendment to the 2000 Order was issued to Oak Grove on June 21, 2004 ("2004 Amendment") that detailed the schedule of compliance for Phase II that required Oak Grove to install a new treatment system by June 15, 2005 and close the aerated lagoon system thereafter. Oak Grove hired Wise and Associates to serve as consulting engineers to evaluate various design options and to draft the final designs and specifications for the new treatment system. For over a year, Wise and Associates submitted inadequate information and calculations to DEQ's Office of Wastewater Engineering pertaining to the design and installation of the new treatment system. DEQ continually asked for the required information that would have enabled the plans and specifications to be approved and a Certificate to Construct (CTC) to be issued. After DEQ held a meeting with Oak Grove and Wise and Associates on June 27,2005 to discuss violations of the 2004 Amendment, the correct information was submitted and a CTC was issued on July 12, 2005 enabling construction to proceed. The proposed Amendment to the 2004 Amendment requires Oak Grove to complete construction of the new package plant treatment system in accordance with the timeline in the schedule of compliance and take the existing system off-line. Civil Charge: \$5,200.

Rappahannock Co. High School STP, Consent Special Order: The Rappahannock County High School STP ("STP"), located in Rappahannock County, Virginia, has a design capacity of 0.005 MGD and treats wastewater from the High School. Rappahannock County Public School's ("County") was referred to enforcement on April 23, 2005 for exceeding permit effluent limits for biochemical oxygen demand (BOD), total suspended solids (TSS), Ammonia, and E.coli. The STP design includes three sand beds that filter suspended and settable solids, biologically treat organic matter, and undergo chemical sorption on the sand grain surface. The problems with the STP stem from the fact that this old design is very sensitive to temperature and loading fluctuations and in addition requires a large amount of maintenance attention. DEQ met with County representatives on May 31, 2005 to discuss the compliance issues. The County agreed to have Environmental System Services, Ltd. ("ESS") complete a full environmental evaluation of the wastewater system and explore opportunities to improve treatment performance. ESS performed its site inspection on August 23, 2005 and issued a final report on September 16, 2005. Among other things, the report recommended several interim corrective actions to immediately improve treatment performance, but concluded that due to the age of the facility a new treatment system should be constructed in the future. The majority of the corrective actions recommended in the report are incorporated into the schedule of compliance found in the proposed Order. The proposed Order requires the County to: (1) develop and implement a grease handling and control program for kitchen and culinary arts staff; (2) install a recirculation system after the sand beds to allow recycling of wastewater; (3) construct a separate grease trap system to segregate kitchen wastes from sanitary sewage lines; and (4) prepare a preliminary report detailing possible design options, costs, and time schedule for construction of an advanced treatment system. After a one-year monitoring period, if the above actions have not enabled the STP's effluent to consistently meet permit limitations, then the County shall construct an advanced treatment system in accordance with the timeline found in the schedule of compliance.

Six-O-Five Village Mobile Home Park STP, Louisa Co., Consent Special Order with Civil Charge: Six-O-Five Village Mobile Home Park STP ("605") is a 0.04 MGD plant that is owned by Mansour Zarin and treats wastewater from the residents of a mobile home park that is located in Louisa County, Virginia. DEQ reissued Mr. Zarin's 605 permit effective May 25, 2004. Mr. Zarin has had recent trouble meeting permit effluent limits (Ammonia, CBOD, and TSS), which prompted DEQ to complete a site inspection that revealed further deficiencies in the operation and maintenance of the facility. 605 is an above ground sequencing batch reactor (SBR) package plant whose operation is dependent upon a computerized program which initiates a series of actions based on data entered by the operations staff. Recent critical equipment failures and power outages/surges have resulted in the control computer resetting to manufacturer's default settings. Reverting back to the default setting significantly affects the biological process and results in Permit effluent violations. Only the contract operator is qualified to return the setting back to the specifically designed program that allows compliance with effluent limitations. During the inspection conducted by DEQ on September 20, 2005 the facility grounds were in very poor shape and appeared that no maintenance work had been done on the site for several months. Numerous deficiencies were noted including the failure to meet Reliability Class II because the back-up generator was inoperable, a lack of maintenance or daily operation logs onsite, and all discharge monitoring samples were shown to be taken from the post aeration chamber not the permitted outfall. The proposed Order requires Mr. Zarin to: (1) employ a contract operator to be onsite a minimum of 5 days/week for 4 hours/day; (2) conduct all effluent sampling at Outfall 001; (3) develop a maintenance program that includes an inventory sheet to ensure each critical part for 605 has a back-up onsite; and (4) increase monitoring frequency to twice per month for CBOD, TSS, and Ammonia for a 6-month period. Civil Charge: \$2,800.

U.S. Dept. of Defense, Arlington Co., Consent Special Order: The U.S. Department of Defense (DoD) owns and operates the Pentagon – Heating and Refrigeration Plant (HRP), located in Arlington County, Virginia. The HRP provides steam for heating and chilled water for air conditioning. Non-contact cooling water for the chiller condensers is drawn from Boundary Channel Lagoon and discharged without treatment into the tidal waters of Roaches Run. Between July 2003 and December 2004, many of the Permit violations were administrative, including late submittal of Discharge Monitoring Reports (DMRs), annual chronic and acute monitoring reports, quarterly progress reports, and instream monitoring results, as well as use of an outdated DMR form and an incomplete DMR. Many of these administrative violations resulted from the thorough and prolonged screening

process that all mail leaving or entering the Pentagon is subject to for security reasons. DoD has since been emailing submissions to DEQ before mailing via U.S. mail, eliminating this problem. Since March 2004, the HRP has violated its Permit effluent limits for copper. Elevated copper levels result when the cooling water passes through soft copper condenser pipes in the chillers. Copper levels are highest after the pipes are scrubbed clean with brushes. In December 2004, DoD began the addition of a liquid copper corrosion inhibitor, Chemstar 505. However, copper levels continued to be above the Permit limit of 4.4 μg/L. The Permit was reissued on October 3, 2005 with an increased copper limit of 34 µg/L, which was determined by recalculating the hardness and reclassification of Roaches Run using a Tier 1 antidegradation designation (instead of Tier 2) to determine the wasteload allocation. However, even at the reissuance limit of 34 µg/L, the HRP would still violate the copper limit about 25% of the year, based on historic effluent levels as reported in the DMRs. The proposed Order requires DoD to implement a multi-tiered approach to address the outstanding copper issue: The first step will be to passivate the chillers with Chemstar 505 by recirculating a high concentration of Chemstar 505 through the pipes while chillers are offline, and then circulate a minimal concentration of Chemstar 505 to maintain passivation after chillers are returned to service. DoD will also request authorization from Arlington County to treat cleaning water by discharging it to the county's sanitary sewer instead of discharging it into Roaches Run. If these approaches are unsuccessful, DoD will submit a contingency plan and schedule that would include replacement of the existing copper condenser tubes with nickel/copper or titanium tubes or another alternative approach.

Mendleson Development, LLC, Louisa Co., Consent Special Order with Civil Charge: Mendleson Development, L.L.C. owns a property known as the Links at Lake Anna (a.k.a. Mendleson Property). The property is planned to be developed into a residential area and golf course. On October 12, 2004, DEQ conducted a site inspection of the Links at Lake Anna and observed that approximately 1,000 linear feet of Contrary Creek (a perennial tributary to Lake Anna) had been dredged to approximately 90 feet wide and 6 feet deep. The dredged material was side-cast into Contrary Creek and shaped into a berm that extended the length of the dredged area. The stream channel had been diverted from the original stream channel to the area that had been dredged (adjacent to the shoreline). DEQ explained that the activity requires authorization from the Virginia Water Protection (VWP) Program and requested that a Joint Permit Application (JPA) be submitted. DEQ received the completed JPA on October 25, 2004. The JPA indicated that Phase I of the dredging project was completed on October 1, 2004, which included the dredging of 1,250 linear feet stream channel and sidecasting 17,000 cubic yards of material back into Contrary Creek. Also, the JPA requested authorization to complete Phases 2 and 3 of the dredging project. As Mendleson Development plans to sell the property to Larner Investments after enforcement matters are addressed, DEQ has no plan to issue a VWP permit to Mendleson Development. On September 7, 2005, DEQ sent an NOV to Mendleson Development citing an alleged violation for the unauthorized dredge and fill of surface waters. At a meeting on September 28, 2005, participants were agreeable to a Consent Order and expressed interest in the Order being finalized as quickly as possible so that the property could be sold to Larner Investments. The response letter to the NOV stated that the description of the activities is factual, and added that prior to the commencement of any activities relevant to the NOV, Mendleson Development received approval for the proposed work from Dominion Virginia Power. The letter contends that it is the public's general belief that approval from Virginia Power alone is sufficient for activities within Lake Anna; however, a VWP permit from DEQ is legally required. The Order requires Mendleson Development to submit a berm stabilization plan and schedule. The plan shall include, at minimum, steps to be taken to stabilize the berm, a monitoring plan, a material management plan for upland disposal of any soils removed as part of the stabilization, and a start and completion date for each step. Berm stabilization is estimated to cost \$15,000. Civil Charge: \$13,720.

Stanley Martin Companies, Inc., Prince William Co., Consent Special Order with Civil Charge: Beazer Homes (Beazer) is a nationwide homebuilder headquartered in Atlanta, Georgia. Beazer maintains a Virginia Division office in Chantilly, Virginia and owns a property known as Parkway West in Prince William County. On March 9, 2005, DEQ conducted a site inspection of the Coles Run Manor site, a property adjacent to Parkway West, that is owned by Stanley Martin Companies, Inc. (Stanley Martin). DEQ observed the unauthorized fill of palustrine forested (PFO) wetlands and intermittent stream channel at the Coles Run Manor site. DEQ had

previously received a Joint Permit Application (JPA) for the development of the Coles Run Manor property on January 13, 2004, but had suspended processing of the application on July 13, 2004 due to insufficient information. On March 21, 2005, DEQ sent a Notice of Violation (NOV) to Stanley Martin citing an alleged violation for the unauthorized fill of PFO wetlands and intermittent stream channel. Beazer responded to the March 21 NOV in a letter dated April 7, 2005. The letter explained that Beazer had received approval from Prince William County for a Public Improvement Plan to serve Parkway West that includes land located on Stanley Martin's Coles Run Manor property. Beazer had received a VWP permit and a U.S. Army Corps of Engineers permit for its Parkway West project, and incorrectly presumed that impacts associated with the Public Improvement Plan were included under the Parkway West permits. Beazer stated that work began on the Stanley Martin site on January 25, 2005. Stanley Martin responded to the March 21 NOV in a letter dated April 13, 2005. The letter explained that the work conducted by Beazer was for a sewer outfall line through the Coles Run Manor property. The letter stated that while Stanley Martin had yet to commence any construction on the property, Stanley Martin agreed to provide additional mitigation. Burgess & Niple, consultant to Stanley Martin, faxed a document to DEQ that stated 0.06 acres of PFO wetlands and 565.4 linear feet (0.1 acres) of intermittent stream channel were filled at the Coles Run Manor site, including 42.92 linear feet of intermittent stream channel that were not proposed for impact in the Coles Run Manor JPA. The other (previously proposed) wetlands and stream impacts totaled five separate impact areas. Beazer and Stanley Martin signed both an easement and a Development Agreement in September 2004. Stanley Martin had signed the easement allowing Beazer to access the Stanley Martin property because Prince William County required the signature prior to approving Beazer's project. At the time the unauthorized impacts were taken, Stanley Martin had not assigned a land developer to the project, nor had the company received Prince William County approval of the site plan. The Development Agreement, explicitly states that "...any clearing, blasting, grading and the like by whichever party proceeds first will benefit the other party..." Therefore, both parties are being held liable for the unauthorized discharge of fill material, and a separate Consent Order has been prepared for each. DEO issued a General Permit Authorization to Stanley Martin for the Coles Run Manor project on June 3, 2005. In addition to the unauthorized impacts, the permit was for impacts yet to be taken. The permit required mitigation at normal ratios, with the intention that additional mitigation would be requested in a Consent Order. On July 11, 2005, DEO sent an NOV to Beazer citing an alleged violation for the unauthorized fill of PFO wetlands and intermittent stream channel. Beazer's response letter stated that the essential facts of the NOV are true, that the taking of those impacts was unintentional, and it was the result of miscommunication between Beazer and Stanley Martin. The Order jointly requires Stanley Martin and Beazer to: (1) perform supplemental mitigation consisting of the purchase of 0.12 wetland credits from an approved wetlands mitigation bank at an approximate cost of \$15,060; (2) perform supplemental mitigation to total 522.48 linear feet of additional stream mitigation consisting of: (a) enhancement of 1,011 linear feet of riparian buffer adjacent to Foggy Bottom Wetland Mitigation Bank in Prince William County. Enhancement will include a 50-foot wide buffer along both sides of 836 linear feet of intermittent stream channel and a 50-foot wide buffer along one side of 175 linear feet of perennial stream channel; and (b) contribution of \$28,600 to the Prince William County Stream Protection Program to be used for a stream channel restoration project within the county; and (3) restore the 42.92 linear feet of intermittent stream channel not proposed for impact in the original JPA. A stream restoration plan and schedule shall be submitted by February 1, 2006. Civil Charge: \$17,002 to be spilt between Beazer and Stanley Martin.

Beazer Homes, Prince William Co., Consent Special Order with Civil Charge: Beazer Homes (Beazer) is a nationwide homebuilder headquartered in Atlanta, Georgia. Beazer maintains a Virginia Division office in Chantilly, Virginia and owns a property known as Parkway West in Prince William County. On March 9, 2005, DEQ conducted a site inspection of the Coles Run Manor site, a property adjacent to Parkway West, that is owned by Stanley Martin Companies, Inc. (Stanley Martin). DEQ observed the unauthorized fill of palustrine forested (PFO) wetlands and intermittent stream channel at the Coles Run Manor site. DEQ had previously received a Joint Permit Application (JPA) for the development of the Coles Run Manor property on January 13, 2004, but had suspended processing of the application on July 13, 2004 due to insufficient information. On March 21, 2005, DEQ sent a Notice of Violation (NOV) to Stanley Martin citing an alleged violation for the unauthorized fill of PFO wetlands and intermittent stream channel. Beazer responded to the March 21 NOV in a

letter dated April 7, 2005. The letter explained that Beazer had received approval from Prince William County for a Public Improvement Plan to serve Parkway West that includes land located on Stanley Martin's Coles Run Manor property. Beazer had received a VWP permit and a U.S. Army Corps of Engineers permit for its Parkway West project, and incorrectly presumed that impacts associated with the Public Improvement Plan were included under the Parkway West permits. Beazer stated that work began on the Stanley Martin site on January 25, 2005. Stanley Martin responded to the March 21 NOV in a letter dated April 13, 2005. The letter explained that the work conducted by Beazer was for a sewer outfall line through the Coles Run Manor property. The letter stated that while Stanley Martin had yet to commence any construction on the property, Stanley Martin agreed to provide additional mitigation. Burgess & Niple, consultant to Stanley Martin, faxed a document to DEO that stated 0.06 acres of PFO wetlands and 565.4 linear feet (0.1 acres) of intermittent stream channel were filled at the Coles Run Manor site, including 42.92 linear feet of intermittent stream channel that were not proposed for impact in the Coles Run Manor JPA. The other (previously proposed) wetlands and stream impacts totaled five separate impact areas. Beazer and Stanley Martin signed both an easement and a Development Agreement in September 2004. Stanley Martin had signed the easement allowing Beazer to access the Stanley Martin property because Prince William County required the signature prior to approving Beazer's project. At the time the unauthorized impacts were taken, Stanley Martin had not assigned a land developer to the project, nor had the company received Prince William County approval of the site plan. The Development Agreement, explicitly states that "...any clearing, blasting, grading and the like by whichever party proceeds first will benefit the other party..." Therefore, both parties are being held liable for the unauthorized discharge of fill material, and a separate Consent Order has been prepared for each. DEQ issued a General Permit Authorization to Stanley Martin for the Coles Run Manor project on June 3, 2005. In addition to the unauthorized impacts, the permit was for impacts yet to be taken. The permit required mitigation at normal ratios, with the intention that additional mitigation would be requested in a Consent Order. On July 11, 2005, DEQ sent an NOV to Beazer citing an alleged violation for the unauthorized fill of PFO wetlands and intermittent stream channel. Beazer's response letter stated that the essential facts of the NOV are true, that the taking of those impacts was unintentional, and it was the result of miscommunication between Beazer and Stanley Martin. The Order jointly requires Stanley Martin and Beazer to: (1) perform supplemental mitigation consisting of the purchase of 0.12 wetland credits from an approved wetlands mitigation bank at an approximate cost of \$15,060; (2) perform supplemental mitigation to total 522.48 linear feet of additional stream mitigation consisting of: (a) enhancement of 1,011 linear feet of riparian buffer adjacent to Foggy Bottom Wetland Mitigation Bank in Prince William County. Enhancement will include a 50-foot wide buffer along both sides of 836 linear feet of intermittent stream channel and a 50-foot wide buffer along one side of 175 linear feet of perennial stream channel; and (b) contribution of \$28,600 to the Prince William County Stream Protection Program to be used for a stream channel restoration project within the county; and (3) restore the 42.92 linear feet of intermittent stream channel not proposed for impact in the original JPA. A stream restoration plan and schedule shall be submitted by February 1, 2006. Civil Charge: \$17,002 to be spilt between Beazer and Stanley Martin.

North Oaks, LLC, Salem, Consent Order: North Oaks, LLC is a residential development company. From late 2004 to early 2005, North Oaks constructed a storm water management structure in wetlands previously delineated by a consultant for North Oaks. DEQ staff inspected the site in March 2005 and issued a NOV to North Oaks for unpermitted disturbance of wetlands on March 15, 2005. DEQ received a permit application from North Oaks on October 3, 2005. DEQ has reviewed the application and has identified deficiencies. North Oaks is in the process of correcting the deficiencies in the application. The order requires North Oaks to submit a compensatory mitigation plan for review and approval and to comply with the approved plan in accordance with its VWP Permit. Civil Charge: \$7,000. Supplemental Environmental Project: North Oaks is required to make a donation of \$5,250.00 to the Salem Fire/EMS Department specifically designated for purchasing hazmat equipment.

Evergreen Development, Gloucester Co., Consent Special Order with Civil Charge: In 1997 DEQ issued a VWP permit for the construction of a commercial development of approximately 120 acres for a Regional Shopping Center and Office Park in Gloucester County. The project proposed to impact 5.3 acres of forested wetlands. To mitigate for the loss of wetlands from this project, a restrictive covenant was established on 62.34

acres of wetlands. The restrictive covenant, states that no activity will be performed on the property in the wetland area provided as compensatory mitigation, unless authorized by DEQ. The permit was modified in 2000 to reflect a change in ownership to Evergreen Development Company, L.L.C. In October 2004, DEQ conducted a site inspection with the County and US Army Corps of Engineers to evaluate the collapse of a storm water management pond berm located behind the Shopping Center and adjacent to the preserved wetland area. When the berm collapsed, sediment from the pond, soil and rip rap was discharged into the protected wetland area for approximately 500-600 linear feet of stream and filling approximately 1.3 acres of wetlands. DEQ issued a Notice of Violation to Evergreen Development Co. on May 3, 2005 for unauthorized fill of the preserved wetlands; for failure of the outfall/overflow structure of the storm water management pond resulting in downstream deposition of sediment; and for failure to notify DEQ of the unauthorized impacts to State waters and wetlands. The order requires that the Company submit and implement an approved restoration plan and schedule; submit monitoring reports of the results of the restoration activities; submit an approvable corrective action plan by December 2007 if the success criteria is not achieved; and pay a civil charge. DEQ, the County and the Corps have met with the consultants and contractors hired by Evergreen Development Co. to discuss repair and restoration of the area. DEQ requested and received a corrective action plan for the site and by letter dated July 12, 2005, DEQ conditionally approved the plan and schedule to restore the site. The cost of corrective action is approximately \$45,000, covering the cost of removing the fill material and replanting wetland vegetation. Civil Charge: \$8,100.

Carroll's Food, Inc., Isle of Wight & Sussex Counties, Consent Special Order with Civil Charge: Carroll's Foods owns and operates a series of confined animal feeding operations in both Isle of Wight and Sussex Counties, Virginia. These farms are operated under VPA permits which authorize the management, storage, and land application of animal waste and do not authorize discharges of animal waste and wastewaters to state waters. Beginning in December 2004, Carroll's Foods experienced a number of unpermitted discharges to state waters related to operational and maintenance issues and mechanical failures. On December 30, 2004, a discharge of approximately 12,000 gallons of animal waste was released from Farm No. 15 due to the separation of an elbow from pressure on a buried waste recycle line. On January 10, 2005, a discharge of approximately 10, 000 gallons of animal waste was released from Farm No. 20 due to a discharge line blockage and float alarm failure. On March 21, 2005, a discharge of approximately 27, 000 gallons of animal waste was released from Farm No. 20 due to a discharge line blockage. On June 16, 2005, a discharge of approximately 12,000 gallons of animal waste was released from Farm No. 2 due to the separation of a clasp on a circulation hose. A Notice of Violation was issued on July 14, 2005 citing all of these unpermitted discharges. In each of the above discharges Carroll's Food acted promptly in reporting the discharges and aggressively conducted clean up actions. In order to prevent future discharges to state waters, Carroll's Foods initiated their farm recycle retrofit project in Virginia which includes a significant system upgrade, and the installation of additional measures to prevent these types of discharges from occurring at all of their farms in Virginia. This project is scheduled to be completed in July 2006 at the cost of approximately \$3,000,000. The proposed Order requires these recycle retrofit projects to be completed at the facilities cited in the NOV no later than June 30, 2006. Civil Charge: \$39,000.

Augusta Cooperative Farm Bureau, Inc., Staunton, Consent Special Order: Augusta Cooperative Farm Bureau, Inc. ("ACFB") owns and operates the no discharge facility serving the fertilizer and pesticide dealer in Augusta County, Virginia, which is subject of the Permit. The Permit requires that ACFB not have discharges of pollutants from the Facility except for 25 year, 24 hour storm events or greater. On May 26, 2005, DEQ received a fish kill complaint on Poor Farm Draft and began an initial fish kill investigation during which staff observed 705 dead fish and other biota. On May 27, 2005, DEQ staff continued the fish kill investigation and count on Poor Farm Draft. DEQ staff conducted an inspection of the Facility as a result of the fish kill investigation. DEQ staff observed two puddles in the Facility's storm water channel which had a strong ammonia smell and brown tan/whitish sediment. In addition, staff observed an ongoing discharge from the Facility's storm water outfall causing tan foaming in the receiving stream. The sampling of the wastewater in the storm water ditch had an ammonia concentration of 7000 mg/l. The sample of effluent from the Facility's storm water outfall had an ammonia result of 350 mg/l. The dead fish, frogs, salamanders and macro-

invertebrates were found below the point where the ACFB discharge enters Poor Farm Draft. DEO staff determined that 3,074 fish were killed on a stream reach of approximately 4.3 kilometers. No dead fish were found upstream of the Facility's outfall. On May 31, 2005, DEQ staff conducted a follow-up inspection of the Facility. This inspection identified a number of operation and maintenance ("O&M") deficiencies including the failure to properly clean up a fertilizer spill on the Facility's roof in the location of the company's fertilizer/chemical conveyors. The DEQ staff documented an unpermitted discharge of pollutants to the storm water drains and discharge from the storm water outfall. Although the area surrounding the Facility experienced storm events immediately preceding the fish kill, none were 25-year, 24-hour storm events or greater. The operational deficiencies led to an unauthorized discharge of pollutants (fertilizer/ammonia) which caused the fish kill. On July 19, 2005, DEQ issued a NOV to ACFB for violations of the Permit's prohibition of discharge of pollutants to State water. The NOV also cited ACFB with failure to maintain a minimum free board of two (2) feet at all times in the storm water storage pond. On August 15, 2005, DEQ met with ACFB in an informal conference to discuss the NOV and resolution of the violations. By letter dated September 7, 2005, ACFB submitted to DEQ a written plan and schedule of corrective actions to return the Facility to compliance with the Permit's requirements. Sections of this plan and schedule have been incorporated into Appendix A of this Order. The proposed Order, signed by ACFB on December 7, 2005, would require August Cooperative Farm Bureau, Inc. to complete certain corrective actions on site. The Order would also include a civil charge. Civil Charge: \$10,200.

Baldwin J. Locher, Jr., Rockbridge Co., Consent Special Order with Civil Charge: Baldwin G. Locher, Jr., owns an underground storage tank (UST) facility located at 818 Rockbridge Road, Glasgow, Virginia. Mr. Locher stored petroleum in these USTs under the requirements of 9 VAC 25-580-10 et seq. Underground Storage Tanks: Technical Standards and Corrective Action Requirements (UST Regulation). The UST Regulation requires that owners of UST facilities protect USTs from corrosion, perform release detection on the USTs, properly register the USTs, properly close non-compliant USTs, and maintain compliance records for DEQ review. A February 15, 2001, inspection of the facility revealed that Mr. Locher had: 1) provided inaccurate UST registration information, 2) failed to perform release detection on the tank and piping for UST #6, 3) failed to test and routinely inspect the corrosion protection system for USTs #1, 2, 3 & 4, 4) not performed an integrity assessment on UST #4 prior to upgrading with corrosion protection, 5) not properly closed UST #R5, and 6) had not maintained compliance records for the USTs. DEQ issued a Warning Letter (WL) to Mr. Locher on July 2, 2001. Receiving no response, DEQ sent an August 20, 2003 follow-up letter to Mr. Locher requesting that he respond to the 2001 WL. The owner responded by submitting documentation, meeting with the DEQ and finally entering into a Letter of Agreement (LOA) with the DEQ on February 6, 2004. The LOA required compliance with the UST Regulation by April 30, 2004. Despite performing and submitting numerous test results for both corrosion protection and release detection, the owner was unable to comply with the UST regulation. DEQ staff issued a Notice of Violation (NOV) to Mr. Locher, dated July 9, 2004, for the remaining alleged violations. The owner continued to meet with DEQ staff on an almost monthly basis to discuss resolution of the alleged violations, the NOV and the draft CSO. Mr. Locher agreed to a corrective action plan for the remaining violations and signed a Consent Special Order on December 9, 2005. DEQ staff received documentation resolving the remaining deficiencies for the USTs on January 5, 2006. All alleged violations noted in the NOV have been resolved in accordance with the conditions of Appendix A in the Order. Civil Charge: \$1,800.

Plecker Construction Co., Inc., Staunton, Consent Special Order with Civil Charge: Plecker Construction Co. Inc., owned an underground storage tank (UST) facility located at 172 Parkersburg Turnpike, Staunton, Virginia. Plecker stored petroleum in these USTs under the requirements of 9 VAC 25-580-10 et seq. Underground Storage Tanks: Technical Standards and Corrective Action Requirements (UST Regulations). The UST Regulation requires that owners of UST facilities protect USTs from corrosion, properly upgrade or close non-compliant USTs by December 22, 1998, properly register USTs, install spill prevention, perform release detection and maintain compliance records for DEQ review. An April 20, 2005, inspection of the facility revealed that Plecker had: 1) failed to protect UST #4 from corrosion, 2) provided incorrect UST registration information, 3) failed to install spill prevention on UST #4, 4) failed to perform release detection for the piping

associated with UST #4, 5) had not properly closed USTs # 1 & 2, and 6) had not maintained compliance records for the USTs. DEQ issued a Notice of Violation (NOV) to Plecker, dated October 11, 2005, for these alleged violations. During a November 8, 2005 meeting with the UST owner to discuss resolution of the NOV and draft CSO, DEQ staff received complete closure documentation for USTs 1 & 2, and the owner informed DEQ of its intention to close UST #4. A corrective action plan was agreed upon and included as Appendix A of the finalized CSO. DEQ staff received complete closure documentation for UST #4 on January 24, 2006, confirming the closure of UST #4 on December 23, 2005. No petroleum release was reported. All alleged violations noted in the NOV have been resolved in accordance with the conditions of Appendix A in the Order. Civil Charge: \$1,820.

Vane Line Bunkering, Inc., Henrico Co., Consent Special Order with Civil Charge: On May 8, 2005, Vane Line Bunkering, Inc. (VLB) was operating a vessel that ran aground and discharged diesel fuel to the James River. The spill was reported to the National Response Center at 11:41, about 15 minutes after the incident occurred. DEQ was notified at 12:15 and arrived at the scene to meet Henrico Fire Department at 1:15. VLB deployed a boom and Henrico County and the U.S. Coast Guard deployed additional booms. On May 9, 2005, VLB hired contractors to begin the clean up. After the barge was pumped of the remaining fuel, it was determined that 24,000 gallons of fuel was discharged to the environment. About 10,000 gallons of fuel mixed with water was recovered by vacuum and skimming. The environmental impact of the release was moderated as the majority of fuel that escaped the deployed booms was blown into a large cove rather than the main body of the James River. Civil Charge: \$61,700.

Significant Noncompliance Report: Four permittees were reported to EPA on the Quarterly Noncompliance Report (QNCR) as being in significant noncompliance (SNC) for the quarter ending September 30, 2005. The permittees, their facilities and the reported instances of noncompliance are as follows:

Permittee/Facility: Town of Culpeper, Culpeper Sewage Treatment PlantType of Noncompliance: Failure to Meet Compliance Schedule (Complete Construction) and Effluent Limit (Ammonia Nitrogen)

City/County: Culpeper, Virginia Receiving Water: Mountain Run

Impaired Water: Mountain Run is listed on the 303(d) report because of fecal coliform contamination.

The contamination has been attributed to nonpoint source pollution.

River Basin: Rappahannock River Basin

Dates of Noncompliance: Compliance schedule noncompliance from August 2004 to present, effluent limit noncompliance from April 2005 through July 2005

Requirements Contained In: Consent Special Order and VPDES Permit DEQ Region:

Northern Virginia Regional Office

Completion of the project was delayed, in part, due to design defects. In addition, subsequent to the initiation of the construction project, the Town determined that a plant expansion and upgrade (to address compliance with ammonia limits) was necessary. The Town therefore proposed a second construction project to both upgrade and expand the plant. An administrative order addressing the planned upgrade and expansion, and which contains a \$10,000 penalty is anticipated to be presented for approval at the March 2006 Board meeting.

Permittee/Facility: E. I. Dupont de Nemours and Company, Dupont Teijin Films Industrial Wastewater

Treatment Plant

Type of Noncompliance: Failure to Meet Permit Effluent Limit (Biochemical Oxygen Demand)

City/County: Hopewell, Virginia Receiving Water: James River

Impaired Water: The James River in the area of the plant discharge is not listed on the 303(d) report.

River Basin: James River Basin

Dates of Noncompliance: April and August 2005

Requirements Contained In: VPDES Permit DEQ Region: Piedmont Regional Office

The staff of the Piedmont Regional Office is evaluating this case for enforcement action.

Permittee/Facility: Western Virginia Water Authority, Roanoke Regional Sewage Treatment Plant Type of Noncompliance: Failure to Meet Permit Effluent Limits (Total Suspended Solids, Biochemical

Oxygen Demand, Kjeldahl Nitrogen, Total Phosphorus)

City/County: Roanoke, Virginia Receiving Water: Roanoke River

Impaired Water: The Roanoke River is listed on the 303(d) report because of fecal coliform and PCB contamination. The source of the PCB contamination is unknown. The sources of the fecal coliform contamination are believed to be urban runoff and overflows or bypasses in the Authority's treatment system.

River Basin: Roanoke River Basin

Dates of Noncompliance: April, May, June and July 2005

Requirements Contained In: Consent Special Order DEQ Region: Western Central Regional Office

The Authority has indicated that the interim effluent limit violations were caused by design defects in an ongoing plant upgrade. The design defect is being corrected. That being the case, the Director of the Department's West Central Regional Office has determined that formal action in this matter is not warranted.

Permittee/Facility: Town of Orange, Orange Sewage Treatment Plant Type of Noncompliance: Failure to Meet Permit Effluent Limit (Copper)

City/County: Orange, Virginia Receiving Water: Rapidan River

Impaired Water: The Rapidan River is listed on the 303(d) report because of fecal coliform

contamination. The source of the fecal coliform contamination is unknown.

River Basin: Rapidan River Basin

Dates of Noncompliance: March, through September 2005

Requirements Contained In: VPDES Permit

DEQ Region: Northern Virginia Regional Office

An order addressing the referenced violations was approved by the Board at its December quarterly meeting.

Brownfield Remediation Loan Program: Section 62.1-229 of Chapter 22, <u>Code of Virginia</u>, authorizes the Board to establish to whom Virginia Clean Water Revolving loans are made, the loan amounts and terms. The staff will be recommending Board action on recently received applications for the Brownfield Remediation Loan Program as well as modifications to the Board's reasonable sewer rate bracketing structure used to establish loan interest rates.

Director's Report - Virginia Water Quality Improvement Fund: The Virginia Water Quality Improvement Fund (WQIF) was established in 1997 with the primary objective of reducing the flow of excess nutrients (nitrogen and phosphorus) into the Chesapeake Bay watershed. The Code of Virginia provides the Secretary of Natural Resources with the responsibility of publishing grant guidelines under the WQIF. The Directors of DEQ and the Department of Conservation and Recreation (DCR) are authorized to sign the grant agreements, with DEQ responsible for grants to point sources and DCR for non-point sources. Since 1997 DEQ has provided WQIF grants for installation of nutrient removal technology at twenty-three point source facilities, obligating approximately \$98.3 million. Twenty of the projects have begun operating their facilities and are achieving the nutrient removal requirements outlined in their grant agreements. In 2005, eleven of these treatment plants discharged below their annual nitrogen load allocations and fifteen discharged below their annual phosphorus load allocations that are contained in the Water Quality Management Planning regulation adopted by the Board in 2005. There are two reasons for these positive results. First, these treatment plants are providing better nutrient removal than what was expected for facilities designed for Biological Nutrient Removal. Second, the volume of wastewater treatment at these facilities is below their design capacity. In order to remain under their nutrient allocations, these treatment plants are expected to install additional nutrient removal, or secure nutrient credits through the nutrient trading program, in order to offset higher wastewater flows due to future growth.

The Board's action in 2005 established nutrient allocations for 125 significant dischargers within Virginia's Chesapeake Bay watershed. Of those, 92 will be eligible for grant assistance under the WQIF. Planning level cost estimates prepared by staff in late 2005 indicated approximately \$737 million would be needed in WQIF grant funds to assist in installation of nutrient removal at these 92 facilities. In response to RFPs sent to these 92 facilities, DEQ has recently received 62 applications requesting approximately \$627 million in WQIF grant funds [list attached]. DEQ staff is currently reviewing the applications and will be meeting with applicants over the coming months to finalize eligible costs and establish the appropriate grant percentage for each project. Under the Code of Virginia the DEQ Director shall enter into grant agreements with all significant dischargers that apply for grants; however, the grant agreements shall contain provisions that payments are subject to the availability of funds. Based on the deposit into the WQIF approved by last year's General Assembly for FY'06, and some remaining funds from prior years, the WQIF currently has approximately \$70 million available to fund these new projects. As of mid-February, the 2006 General Assembly is currently considering the budget proposal by former Governor Warner, that has been endorsed by Governor Kaine, to deposit an additional \$14.5 million in FY'06 [from budget surplus], and another \$200 million into the FY'07-08 biennium budget. If these new funds are approved, a total of \$284.5 million would be available, a significant start towards meeting the Commonwealth's commitment to fund these needed projects. In addition, treatment plant owners may also apply for low interest loans from the Virginia Revolving Loan Fund. DEQ is working to ensure proper coordination between the loan and grant programs so that the eligible facilities receive the best possible funding package for their nutrient removal projects.